CompTIA

Exam Questions CV0-004

CompTIA Cloud+

NEW QUESTION 1
A cloud solutions architect needs to have consistency between production, staging, and development environments. Which of the following options will best achieve this goal?

A. Using Terraform templates with environment variables
B. Using Grafana in each environment
C. Using the ELK stack in each environment
D. Using Jenkins agents in different environments

Answer: A

Explanation:
Terraform templates with environment variables can ensure consistency across different environments such as production, staging, and development. Terraform allows for infrastructure as code, which can be used to define and maintain infrastructure with consistency.References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 2
A cloud engineer is running a latency-sensitive workload that must be resilient and highly available across multiple regions. Which of the following concepts best addresses these
requirements?

A. Cloning
B. Clustering
C. Hardware passthrough
D. Stand-alone container

Answer: B

Explanation:
Clustering refers to the use of multiple servers/computers to form what appears to be a single system. This concept is key for achieving high availability and resilience, especially for latency-sensitive workloads. By distributing the workload across a cluster that spans multiple regions, the system can continue to operate even if one or more nodes fail, thus maintaining performance and availability. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274-282-2)

NEW QUESTION 3
A company requests that its cloud administrator provision virtual desktops for every user. Given the following information:
• One hundred users are at the company.
• A maximum of 30 users work at the same time.
• Users cannot be interrupted while working on the desktop. Which of the following strategies will reduce costs the most?

A. Provisioning VMs of varying sizes to match user needs
B. Configuring a group of VMs to share with multiple users
C. Using VMs that have spot availability
D. Setting up the VMs to turn off outside of business hours at night

Answer: D

Explanation:
Setting up the VMs to turn off outside of business hours at night will reduce costs the most, especially since a maximum of 30 users work at the same time and users cannot be interrupted while working. This approach ensures that resources are used only when necessary.References: Cost management and efficient resource utilization strategies like scheduling VMs to turn off during idle times are discussed within the financial management aspects of cloud services in the CompTIA Cloud+ exam objectives.

NEW QUESTION 4
Which of the following network types allows the addition of new features through the use of network function virtualization?

A. Local area network
B. Wide area network
C. Storage area network
D. Software-defined network

Answer: D

Explanation:
A Software-Defined Network (SDN) is a network approach that allows the addition of new features through software configurations rather than hardware updates, making use of network function virtualization (NFV). NFV decouples network functions from proprietary hardware appliances, so they can run in software, which aligns with the flexibility offered by SDN. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Network Management

NEW QUESTION 5
A cloud engineer is troubleshooting an application that consumes multiple third-party REST APIs. The application is randomly expenenang high latency. Which of the following would best help determine the source of the latency?

A. Configuring centralized logging to analyze HTTP requests
B. Running a flow log on the network to analyze the packets
C. Configuring an API gateway to track all incoming requests
D. Enabling tracing to detect HTTP response times and codes

Answer: D

Explanation:
Enabling tracing in the application can help determine the source of high latency by providing detailed information on HTTP request and response times, as well as response codes. This can identify which API calls are experiencing delays and contribute to overall application latency, allowing for targeted troubleshooting and optimization.

NEW QUESTION 6
Servers in the hot site are clustered with the main site.

A. Network traffic is balanced between the main site and hot site servers.
B. Offline server backups are replicated hourly from the main site.
C. All servers are replicated from the main site in an online status.
D. Which of the following best describes a characteristic of a hot site?

Answer: C

Explanation:
When servers in a hot site are clustered with the main site, it indicates that all servers are replicated from the main site in an online status. This means that the hot site maintains a live, real-time copy of data and applications, ensuring immediate availability in the event of a failure at the main site. Unlike options A and B, which describe load balancing and backup strategies respectively, clustering with a hot site as described in option C ensures that the hot site can take over with minimal downtime, maintaining business continuity.
References: CompTIA Cloud+ CV0-004 Study Guide and Official CompTIA Content

NEW QUESTION 7
An DevOps engineer is receiving reports that users can no longer access the company's web application after hardening of a web server. The users are receiving the following error:
ERR_SSLJ/ERSION_OR_CIPHER_MISMATCH.
Which of the following actions should the engineer take to resolve the issue?

A. Restart the web server.
B. Configure TLS 1.2 or newer.
C. Update the web server.
D. Review logs on the WAF

Answer: B

Explanation:
To resolve the ERR_SSL_VERSION_OR_CIPHER_MISMATCH error after hardening a web server, the engineer should configure the server to use TLS 1.2 or newer. This error often occurs when the server or client supports an outdated version of SSL/TLS or incompatible cipher suites. Updating to a modern, secure version of TLS ensures compatibility and enhances security.References: The CompTIA Cloud+ certification includes governance, risk, compliance, and security for the cloud, emphasizing the importance of implementing up-to-date security protocols like TLS to protect data in transit and ensure secure communications in cloud environments.

NEW QUESTION 8
A company runs a discussion forum that caters to global users. The company's monitoring system reports that the home page suddenly is seeing elevated response times, even though internal monitoring has reported no issues or changes. Which of the following is the most likely cause of this issue?

A. Cryptojacking
B. Human error
C. DDoS
D. Phishing

Answer: C

Explanation:
Elevated response times without reported issues or changes internally could indicate a Distributed Denial of Service (DDoS) attack, where multiple systems flood the bandwidth or resources of a targeted system, usually one or more web servers. References: CompTIA Security+ Guide to Network Security Fundamentals by Mark Ciampa.

NEW QUESTION 9
A cloud engineer has provisioned a VM for a high-frequency trading application. After the VM is put into production, users report high latency in trades. The engineer checks the last six hours of VM metrics and sees the following:
• CPU utilization is between 30% to 60%.
• Networkln is between 50Kbps and 70Kbps.
• NetworkOut is between 3.000Kpbs and 5.000Kbps.
• DiskReadOps is at 30.
• DiskWriteOps is at 70
• Memory utilization is between 50% and 70%.
Which of the following steps should the engineer take next to solve the latency issue?

A. Move to a network-optimized instance type as the network throughput is not enough.
B. Modify the disk IOPS to a higher value as the disk IO is being bottlenecked at 100 IOPS.
C. Increase the memory of the instance as the high-frequency trading application requires more RAM.
D. Increase the instance size to allocate more vCPUs as the CPU utilization is very high.

Answer: A

Explanation:

Since the NetworkOut is significantly higher than NetworkIn and considering the nature of a high-frequency trading application, the issue most likely lies with network throughput. Moving to a network-optimized instance type would provide higher network bandwidth, which can reduce latency in trades.References: This solution is derived from the Management and Technical Operations domain of the CompTIA Cloud+ objectives, focusing on performance optimization for cloud services.

NEW QUESTION 10
Which of the following requirements are core considerations when migrating a small business's on-premises applications to the cloud? (Select two).

A. Availability
B. Hybrid
C. Testing
D. Networking
E. Compute
F. Logs

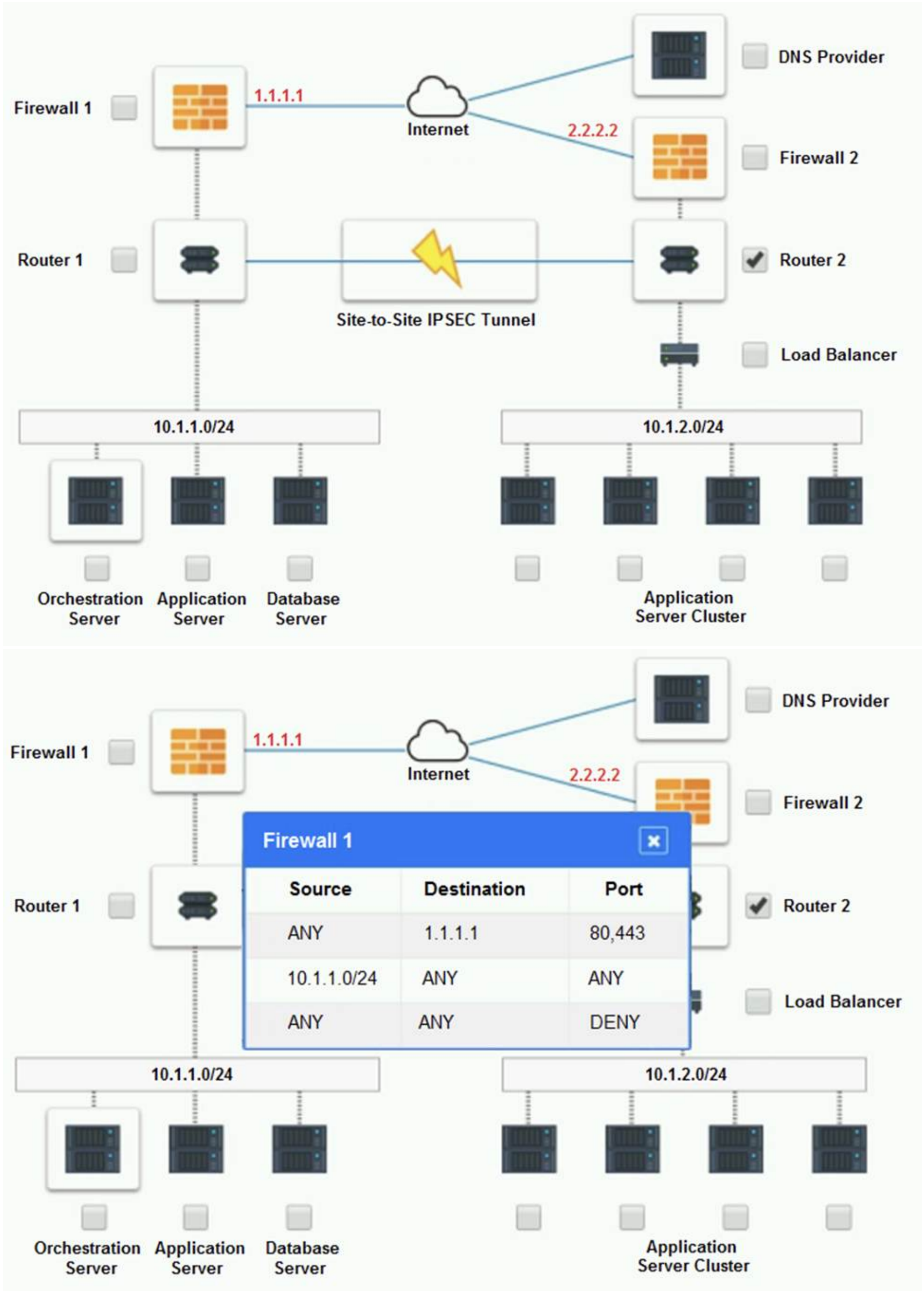
Answer: AD

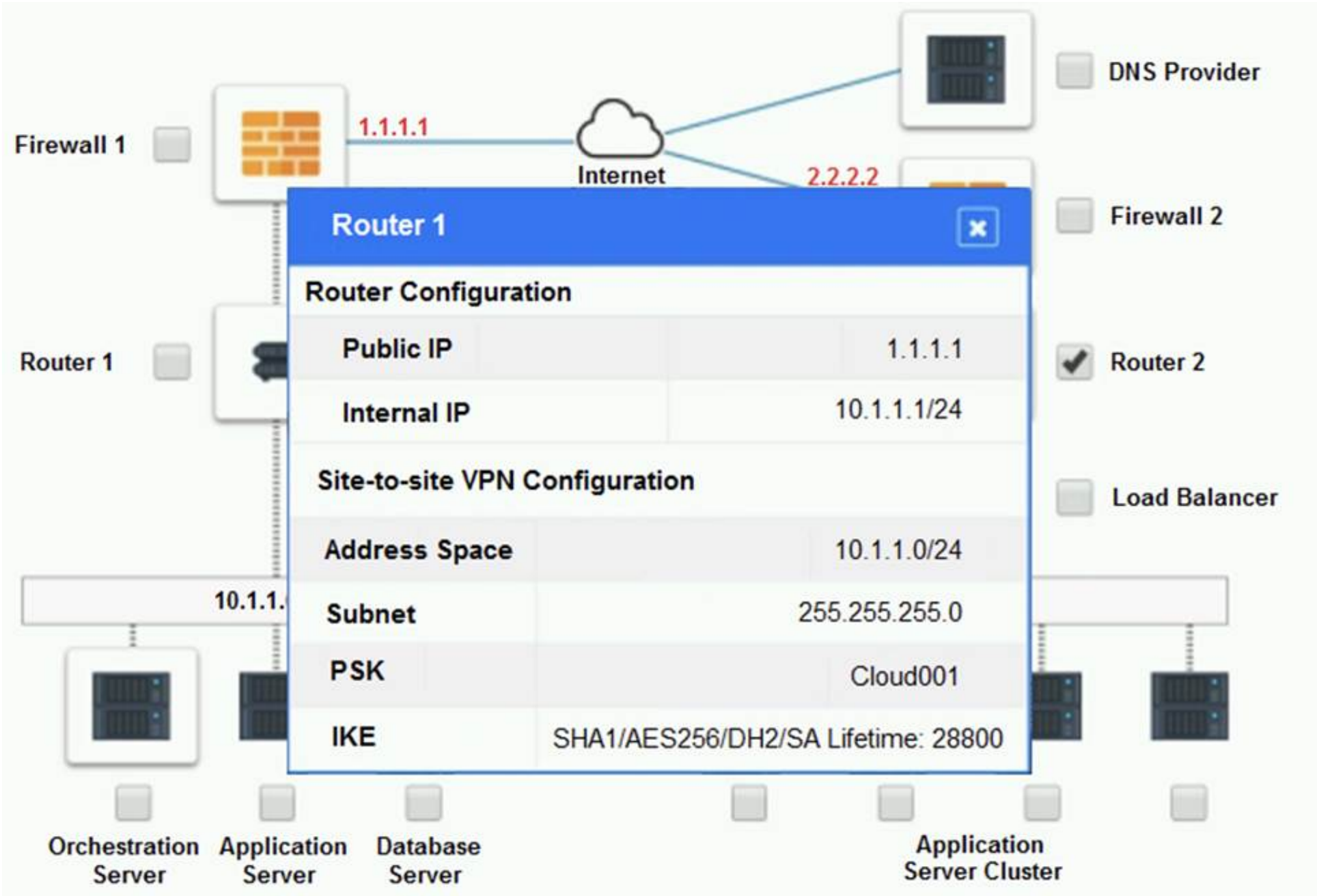
Explanation:
When migrating on-premises applications to the cloud for a small business, availability and networking are core considerations. Ensuring that applications are available and that the network is capable of handling the new cloud traffic are pivotal for a successful transition.References: The migration process and its core considerations, including availability and networking, are topics within the Business Principles of Cloud Environments in the CompTIA Cloud+ material.

NEW QUESTION 10
SIMULATION
A company has decided to scale its e-commerce application from its corporate datacenter to a commercial cloud provider to meet an anticipated increase in demand during an upcoming holiday.
The majority of the application load takes place on the application server under normal conditions. For this reason, the company decides to deploy additional application servers into a commercial cloud provider using the on-premises orchestration engine that installs and configures common software and network configurations.
The remote computing environment is connected to the on-premises datacenter via a site- to-site IPSec tunnel. The external DNS provider has been configured to use weighted round-robin routing to load balance connections from the Internet.
During testing, the company discovers that only 20% of connections completed successfully.
INSTRUCTIONS
Review the network architecture and supporting documents and fulfill these requirements: Part 1:
- Analyze the configuration of the following components: DNS, Firewall 1, Firewall 2, Router 1, Router 2, VPN and Orchestrator Server.
- Identify the problematic device(s).

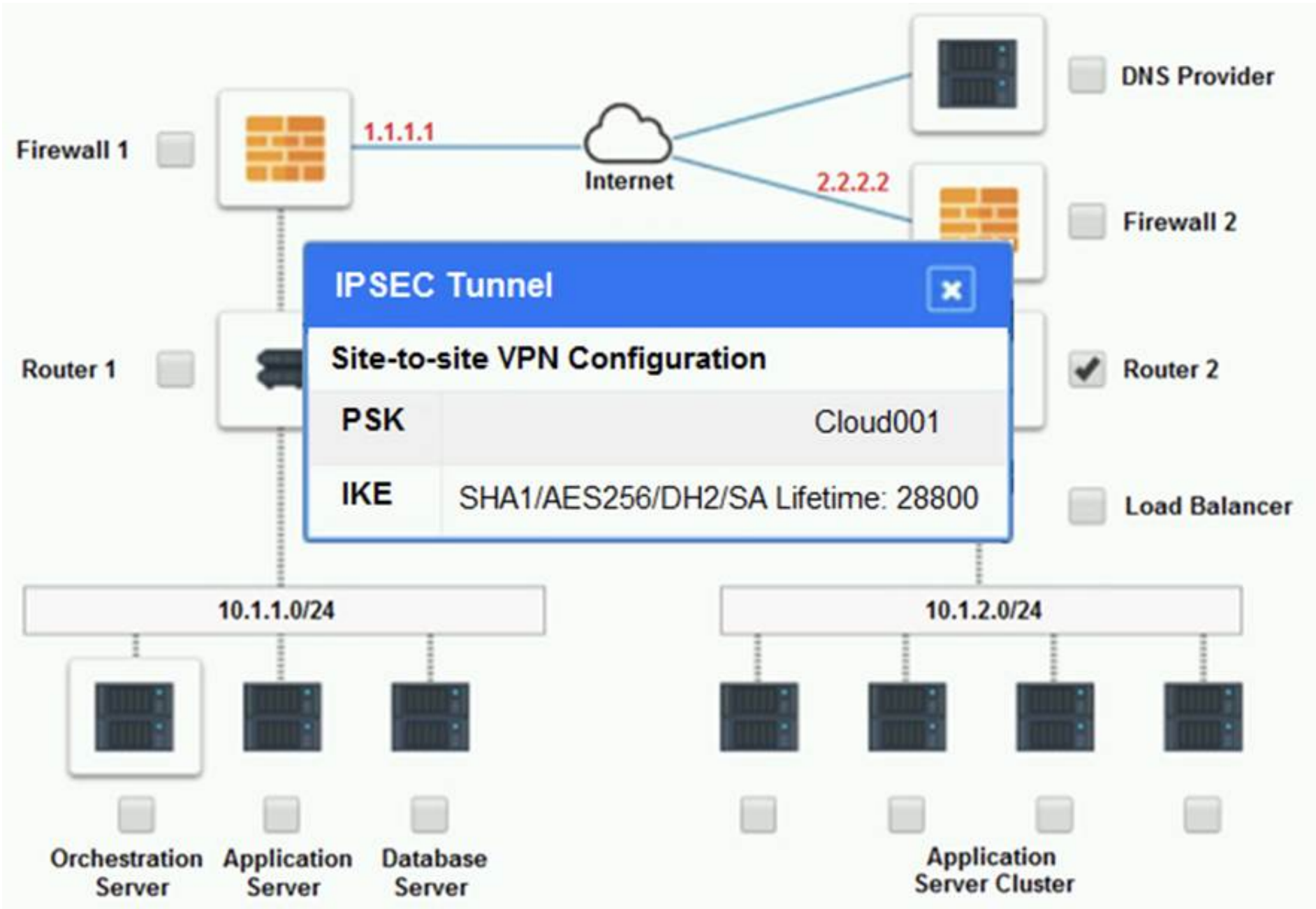
Part 2:
- Identify the correct options to provide adequate configuration for hybrid cloud architecture.

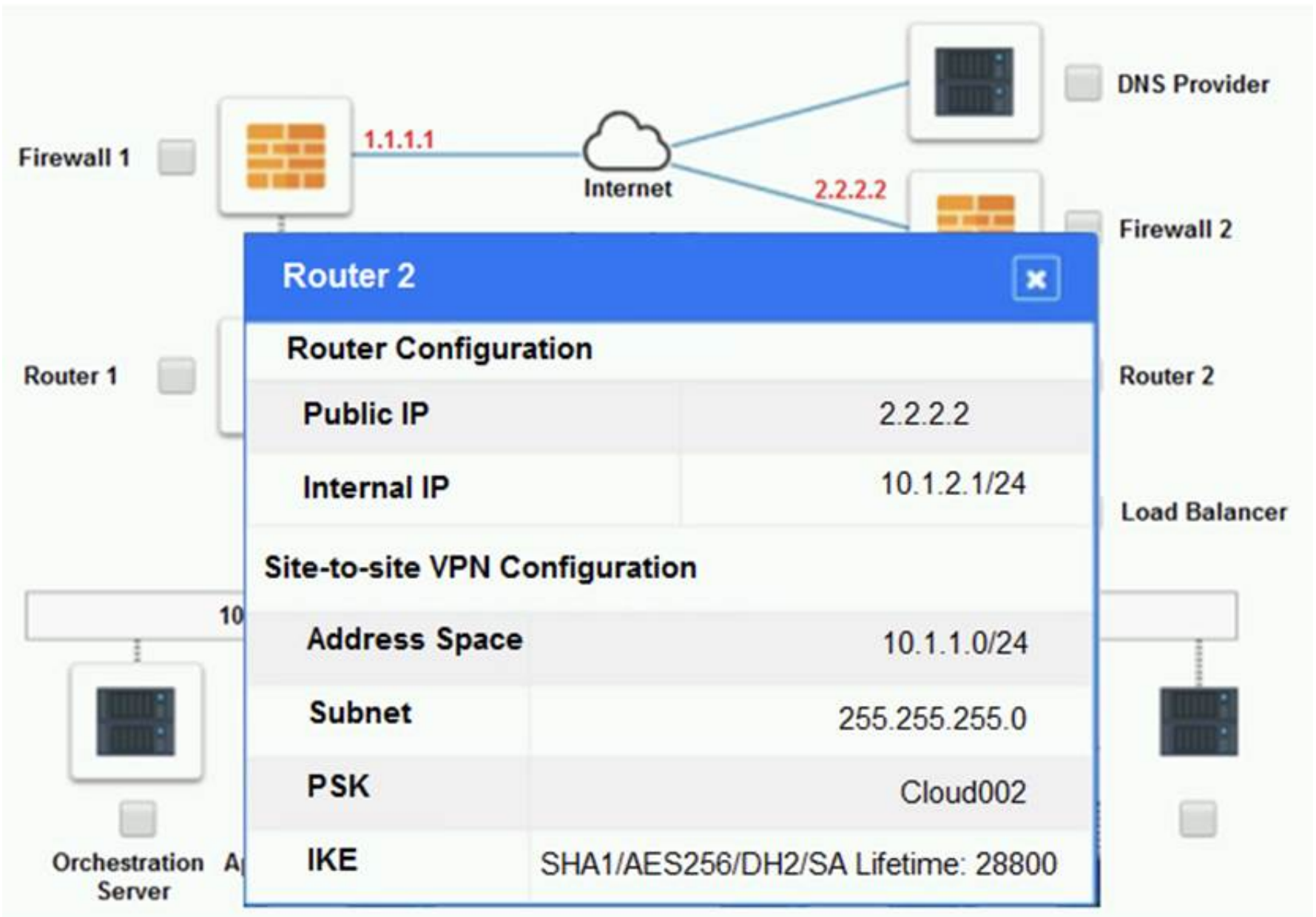
If at any time you would like to bring back the initial state of the simulation, please click the Reset All button.
Part 1:
Cloud Hybrid Network Diagram

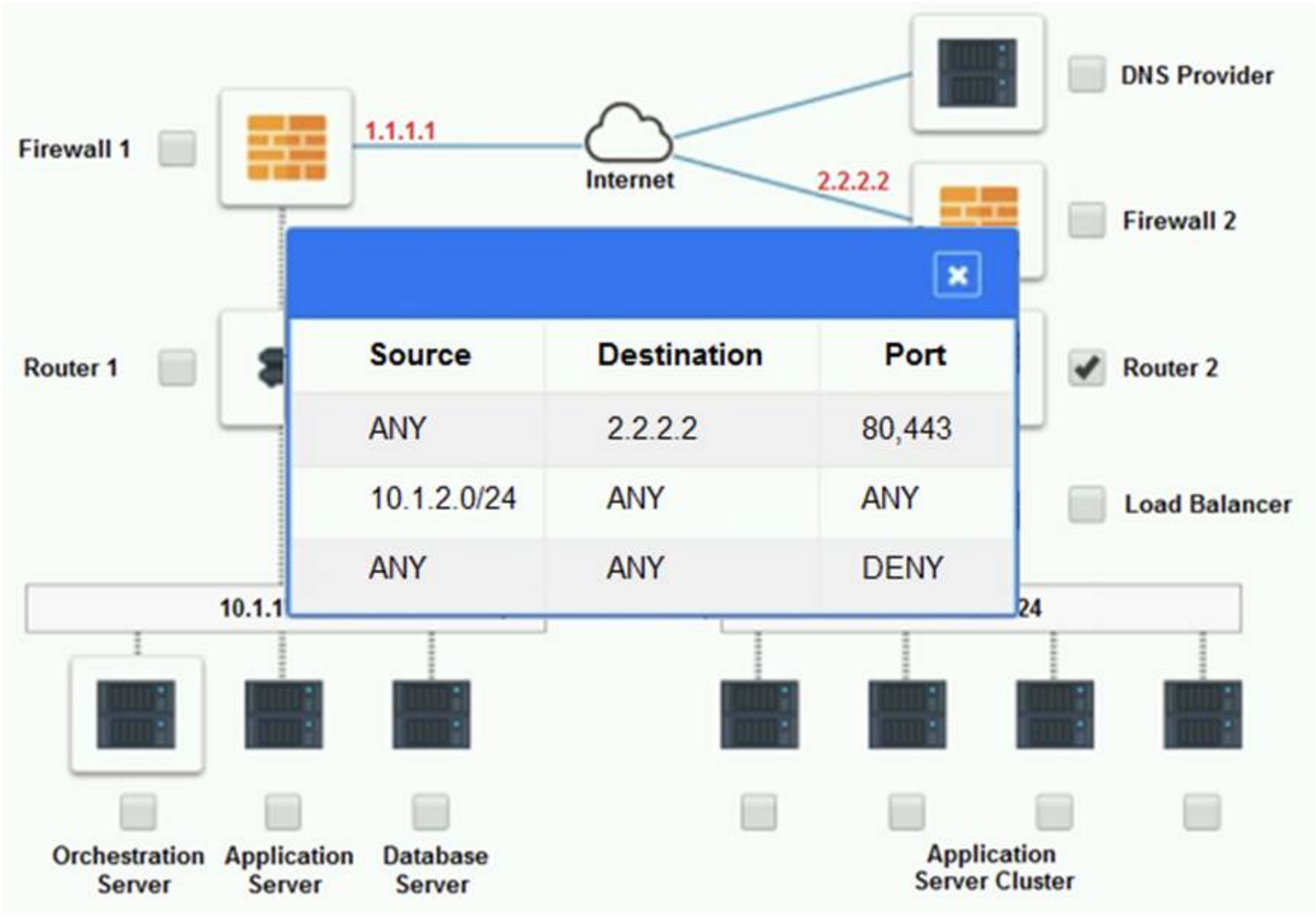

Firewall 1
1.1.1.1
Internet
2.2.2.2
DNS Provider
Firewall 2
Router 1
Site-to-Site IPSEC Tunnel
Router 2
Load Balancer
10.1.1.0/24
10.1.2.0/24
Orchestration Server
Application Server
Database Server
Application Server Cluster
Firewall 1
Source
Destination
Port
ANY
1.1.1.1
80,443
10.1.1.0/24
ANY
ANY
ANY
ANY
DENY

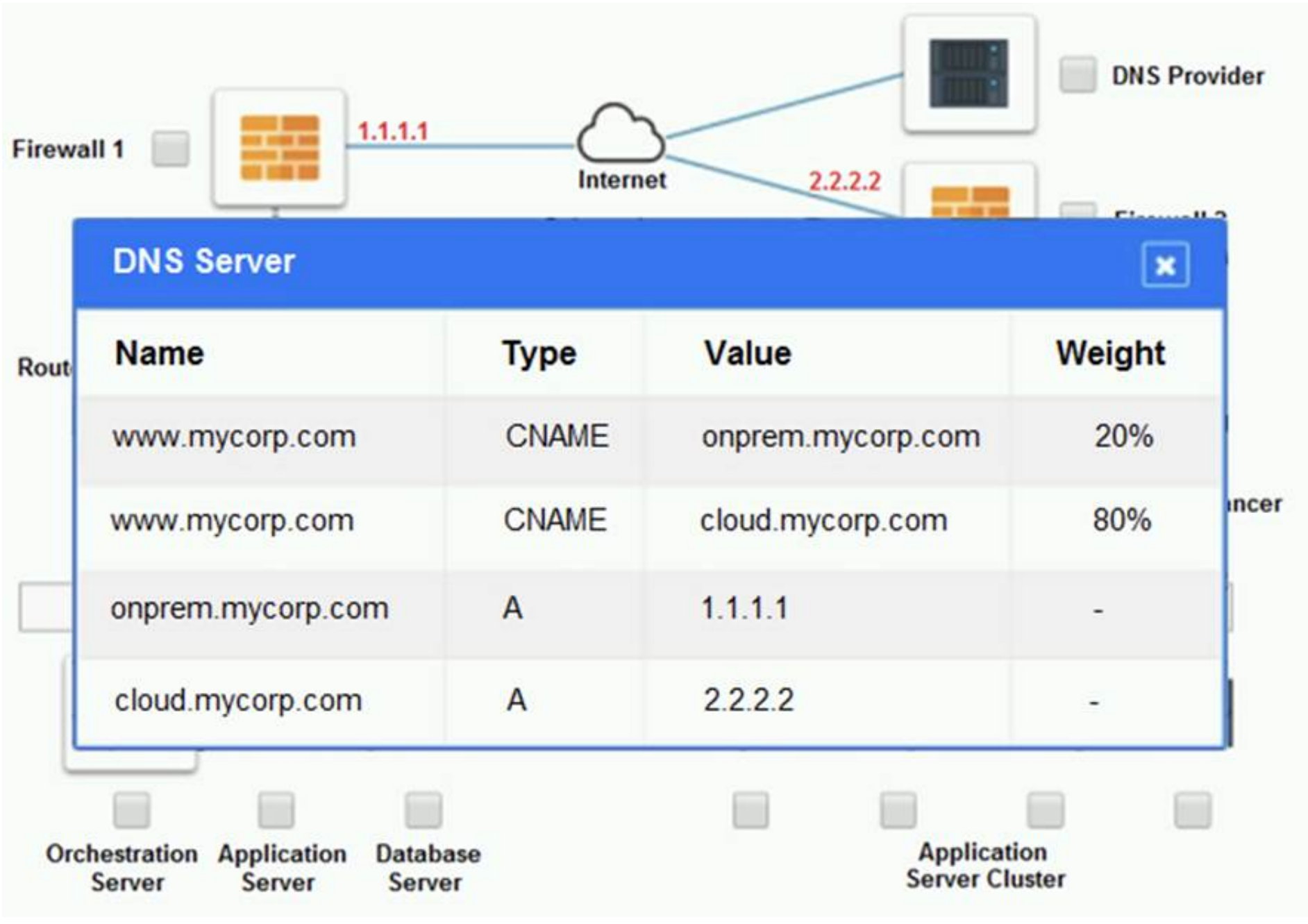

DNS Provider
Firewall 1
1.1.1.1
Internet
2.2.2.2
Firewall 2
Router 1
Router Configuration
Public IP
1.1.1.1
Internal IP
10.1.1.1/24
Router 1
Router 2
Site-to-site VPN Configuration
Load Balancer
Address Space
10.1.1.0/24
10.1.1.
Subnet
255.255.255.0
PSK
Cloud001
IKE
SHA1/AES256/DH2/SA Lifetime: 28800
Orchestration Server
Application Server
Database Server
Application Server Cluster


DNS Provider
Firewall 1
1.1.1.1
Internet
2.2.2.2
Firewall 2
Router 1
Router 2
Load Balancer
10.1.1.0/
24
Orchestration Server
Applica
Serve
ion
uster
Orchestration Server
Name Basic_Server
Network 10.1.1.0/24
Name Cloud_Server
Network 10.1.2.0/24
Name Application_Server
Baseline Basic_Server
Type Webserver
Version 1.0
Name Database_Server
Baseline Basic_Server
Type Database Server
Version 1.0
Name Corporate_Datacenter
Baseline Application_Server
Count 1
Name Cloud_Service_Provider
Baseline Cloud_Server
Count 4


DNS Provider
Firewall 1
1.1.1.1
Internet
2.2.2.2
Firewall 2
IPSEC Tunnel
Site-to-site VPN Configuration
PSK
Cloud001
IKE
SHA1/AES256/DH2/SA Lifetime: 28800
Router 1
Router 2
Load Balancer
10.1.1.0/24
10.1.2.0/24
Orchestration Server
Application Server
Database Server
Application Server Cluster


DNS Provider
Firewall 1
1.1.1.1
Internet
2.2.2.2
Firewall 2
Router 2
Router Configuration
Public IP
2.2.2.2
Internal IP
10.1.2.1/24
Site-to-site VPN Configuration
Address Space
10.1.1.0/24
Subnet
255.255.255.0
PSK
Cloud002
IKE
SHA1/AES256/DH2/SA Lifetime: 28800
Router 1
Router 2
Load Balancer
Orchestration Server





Part 2:
Only select a maximum of TWO options from the multiple choice question

- ☐ Deploy a Replica of the Database Server in the Cloud Provider.
- ☐ Update the PSK (Pre-shared key) in Router 2.
- ☐ Update the A record on the DNS from 2.2.2.2 to 1.1.1.1.
- ☐ Promote deny All to allow All in Firewall 1 and Firewall 2.
- ☐ Change the Address Space on Router 2.
- ☐ Change internal IP Address of Router 1.
- ☐ Reverse the Weight property in the two CNAME records on the DNS.
- ☐ Add the Application Server at on-premises to the Load Balancer.

A. Mastered
B. Not Mastered

Answer: A

Explanation:
Part 1: Router 2
The problematic device is Router 2, which has an incorrect configuration for the IPSec tunnel. The IPSec tunnel is a secure connection between the on-premises datacenter and the cloud provider, which allows the traffic to flow between the two networks. The IPSec tunnel requires both endpoints to have matching parameters, such as the IP addresses, the pre-shared key (PSK), the encryption and authentication algorithms, and the security associations (SAs) .
According to the network diagram and the configuration files, Router 2 has a different PSK and a different address space than Router 1. Router 2 has a PSK of ??1234567890??, while Router 1 has a PSK of ??0987654321??. Router 2 has an address space of 10.0.0.0/8, while Router 1 has an address space of 192.168.0.0/16. These mismatches prevent the IPSec tunnel from establishing and encrypting the traffic between the two networks.
The other devices do not have any obvious errors in their configuration. The DNS provider has two CNAME records that point to the application servers in the cloud provider, with different weights to balance the load. The firewall rules allow the traffic from and to the application servers on port 80 and port 443, as well as the traffic from and to the VPN server on port 500 and port 4500. The orchestration server has a script that installs and configures the application servers in the cloud provider, using the DHCP server to assign IP addresses.
Part 2:
The correct options to provide adequate configuration for hybrid cloud architecture are:
? Update the PSK in Router 2.
? Change the address space on Router 2.
These options will fix the IPSec tunnel configuration and allow the traffic to flow between the on-premises datacenter and the cloud provider. The PSK should match the one on Router 1, which is ??0987654321??. The address space should also match the one on Router 1, which is 192.168.0.0/16.
* B. Update the PSK (Pre-shared key in Router2)
* E. Change the Address Space on Router2

NEW QUESTION 13
A cloud security analyst is investigating the impact of a recent cyberattack. The analyst is reviewing the following information:
Web server access log:
* 104.210.233.225 - - [21/10/2022:11:17: 40] "POST /uploadfile.html?f=myfile.php" 200 1638674
* 45.32.10.66 - - [21/10/2022:11:19:12] "GET /welcome.html" 200 5812
* 104.210.233.225 - - [21/10/2022:11:21:19] "GET / .. / .. / .. / .. /conf/server.xml HTTP/1.1" 200 74458
* 45.32.10.66 - - [21/10/22:11:22:32] "GET /admin.html HTTP/1.1" 200 9518
Web application firewall log:
"2022/10/21 11:17:33" "10.25.2.35" "104. 210.233.225" "userl" "File transfer completed successfully."
"2022/10/21 11:21:05" "10. 25.2. 35" "104. 210.233.225" "userl" "Accessed application page."
"2022/10/21 11:22:13" "10.25.2.35" "45. 32. 10. 66" "user2" "Accessing admin page. " Which of the following has occurred?

A. The corporate administration page was defaced by the attacker.
B. A denial-of-service attack was successfully performed on the web server.
C. A new user was created on the web server by the attacker.
D. Sensitive information from the corporate web server was leaked.

Answer: D

Explanation:
The logs indicate that the IP address 104.210.233.225 made a GET request that appears to traverse directories (as indicated by the '/../../') to access 'server.xml',

which is a configuration file for the server. This type of request is indicative of a directory traversal attack, which can lead to unauthorized access to sensitive files on the server. The successful 200 response code suggests that the file was accessed, implying that sensitive configuration data could have been leaked. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 14
A software engineer at a cybersecurity company wants to access the cloud environment. Per company policy, the cloud environment should not be directly accessible via the internet. Which of the following options best describes how the software engineer can access the cloud resources?

A. SSH
B. Bastion host
C. Token-based access
D. Web portal

Answer: B

Explanation:
A bastion host is the best option described for accessing cloud resources without direct internet access. It acts as a secure gateway to access internal networks from external sources and is often used in conjunction with other security measures such as SSH for secure connections.References: The use of bastion hosts as a secure access point to cloud resources is a security best practice covered in the CompTIA Cloud+ certification's domain on cloud security.

NEW QUESTION 16
A company has decided to adopt a microservices architecture for its applications that are deployed to the cloud. Which of the following is a major advantage of this type of architecture?

A. Increased security
B. Simplified communication
C. Reduced server cost
D. Rapid feature deployment

Answer: D

Explanation:
A major advantage of adopting a microservices architecture is rapid feature deployment. Microservices allow for independent development, deployment, and scaling of individual service components, enabling teams to bring new features to market more quickly and efficiently compared to monolithic architectures.References: The CompTIA Cloud+ certification covers cloud design aspects, including architectural models like microservices, emphasizing their role in facilitating agile development practices and rapid feature release cycles in cloud environments.

NEW QUESTION 21
An administrator is creating a cron job that shuts down the virtual machines at night to save on costs. Which of the following is the best way to achieve this task?
A)

```
for X in list_vms() do
if [ describe_vm_status(X) || running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

B)

```
for X in list_vms() do
if [ describe_vm_status(X) > running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

C)

```
for X in list_vms() do
if [ describe_vm_status(X) == running]
     shutdown_vm(X)
else
     echo "vm $X stopped"
done
```

D)

```
for X in list_vms() do
if [ describe_vm_status(X) != running]
     shutdown_vm(X)
else
     echo "vm $X is stopped"
done
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: C

Explanation:
Option C is the correct script for shutting down virtual machines that are currently running. It iterates through a list of VMs, checks if the status of each VM is 'running', and if so, proceeds to shut down the VM. The script then prints a message stating that the VM has been stopped. This approach ensures that only VMs that are actively running are targeted for shutdown, optimizing resource utilization and cost savings.

NEW QUESTION 22
Which of the following migration types is best to use when migrating a highly available application, which is normally hosted on a local VM cluster, for usage with an external user population?

A. Cloud to on-premises
B. Cloud to cloud
C. On-premises to cloud
D. On-premises to on-premises

Answer: C

Explanation:
When migrating a highly available application normally hosted on a local VM cluster for usage with an external user population, the best migration type would be on- premises to cloud. This allows the application to leverage the cloud's scalability and reach, providing better access to the external users. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Migration

NEW QUESTION 26
A company wants to optimize cloud resources and lower the overhead caused by managing multiple operating systems. Which of the following compute resources would be best to help to achieve this goal?

A. VM
B. Containers
C. Remote desktops
D. Bare-metal servers

Answer: B

Explanation:
Containers are the best compute resources to optimize cloud resources and lower the overhead caused by managing multiple operating systems. Containers

encapsulate applications and their dependencies into a single executable package, running on a shared OS kernel, which reduces the need for separate operating systems for each application and simplifies resource management.References: CompTIA Cloud+ materials discuss management and technical operations in cloud environments, including the use of containers to improve resource utilization and operational efficiency by minimizing the overhead associated with traditional VMs.

NEW QUESTION 27
A company wants to create a few additional VDIs so support vendors and contractors have a secure method to access the company's cloud environment. When a cloud administrator attempts to create the additional instances in the new locations, the operation is successful in some locations but fails in others. Which of the following is the most likely reason for this failure?

A. Partial service outages
B. Regional service availability
C. Service quotas
D. Deprecation of functionality

Answer: C

Explanation:
If a cloud administrator can create additional instances in some locations but not others, the most likely reason for this failure is service quotas. Cloud providers often have quotas on the number of resources that can be created, and these limits can vary by region. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Resource Management

NEW QUESTION 28
A high-usage cloud resource needs to be monitored in real time on specific events to guarantee its availability. Which of the following actions should be used to meet this requirement?

A. Configure a ping command to identify when the cloud instance is out of service.
B. Create a dashboard with visualizations to filter the status of critical activities.
C. Collect all the daily activity from the cloud instance and create a dump file for analysis.
D. Schedule an hourly scan of the network to check for the availability of the resource.

Answer: B

Explanation:
To guarantee real-time monitoring of a high-usage cloud resource, creating a dashboard with visualizations to filter the status of critical activities is effective. This allows for a quick visual assessment of the system's health and performance, enabling immediate action if specific events indicate potential issues with availability.References: Real-time monitoring and the use of dashboards for tracking critical cloud resources are part of the cloud management best practices covered under the CompTIA Cloud+ objectives.

NEW QUESTION 29
A cloud engineer wants to implement a disaster recovery strategy that:
. Is cost-effective.
. Reduces the amount of data loss in case of a disaster.
. Enables recovery with the least amount of downtime.
Which of the following disaster recovery strategies best describes what the cloud engineer wants to achieve?

A. Cold site
B. Off site
C. Warm site
D. Hot site

Answer: D

Explanation:
A hot site is a disaster recovery strategy that is cost-effective, minimizes data loss, and allows for the fastest recovery time in case of a disaster. It is an exact replica of the original site of the organization, with full computer systems as well as near-complete backups of user data. Hot sites are operational 24/7 and can take over functionality from the primary site immediately or with minimal delay. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Disaster Recovery

NEW QUESTION 30
A cloud engineer is provisioning a new application that requires access to the organization's public cloud resources. Which of the following is the best way for the cloud engineer to authenticate the application?

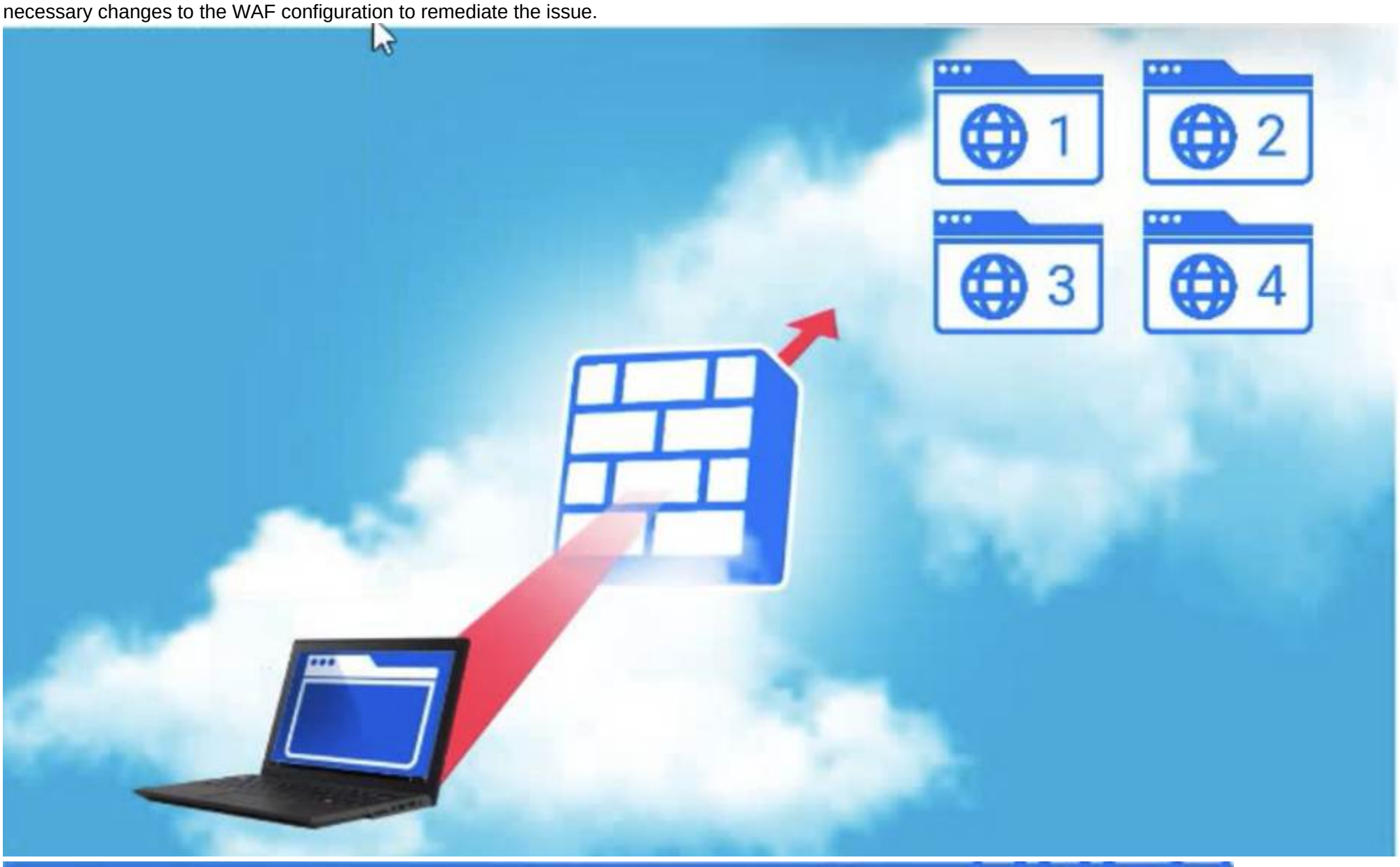
A. Access key
B. API
C. MFA token
D. Username and Password

Answer: A

Explanation:
The best way to authenticate an application requiring access to an organization's public cloud resources is through the use of an access key. Access keys provide a secure means of authentication for applications and services without the need for interactive login credentials. This method is particularly useful for automated processes or applications that need to interact with cloud services programmatically, ensuring secure and efficient access control.References: CompTIA Cloud+ content emphasizes the importance of secure authentication mechanisms, such as access keys, in managing and securing access to cloud resources, aligning with best practices for cloud security and application deployment.

NEW QUESTION 35
SIMULATION

A company hosts various containerized applications for business uses. A client reports that one of its routine business applications fails to load the web-based login prompt hosted in the company cloud.
Click on each device and resource. Review the configurations, logs, and characteristics of each node in the architecture to diagnose the issue. Then, make the necessary changes to the WAF configuration to remediate the issue.

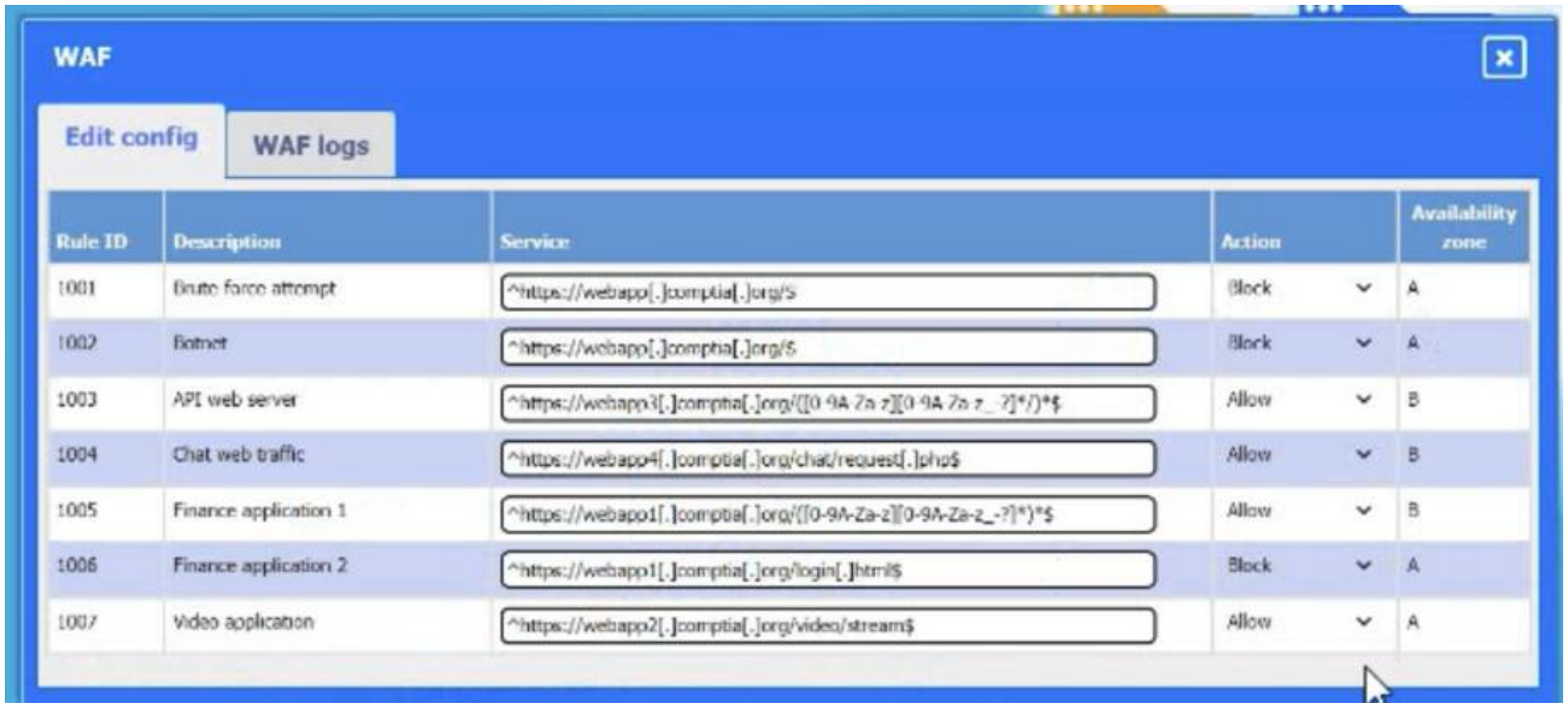


Web app 1

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp1	FIN	10.22.10.11	443

Web app 2

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp2	VIDEO	10.22.10.21	443



A. Mastered
B. Not Mastered

Answer: A

Explanation:
From the image, it's noticeable that some finance application rules are set to "Block" traffic. If the client's issue is with a finance-related application not loading the login prompt, these rules could be the cause.
The rule with ID 1005, labeled "Finance application 1", is configured to allow access to "webapp1" for finance-related paths. However, rule 1006, labeled "Finance application 2", is set to block access to "webapp1" for login-related paths.
To remediate the issue based on the WAF configuration you have provided, you would want to:
? Ensure that the correct paths to the finance application are allowed through the WAF.
? Modify any rules that are incorrectly blocking access to the application.
If the client's problem is specifically with the login prompt, then rule 1006 seems the most likely culprit. Changing the action from "Block" to "Allow" for rule 1006 could potentially resolve the client's issue. The rule should be carefully reviewed and updatedto ensure legitimate traffic is not being blocked while still protecting against unauthorized access.

NEW QUESTION 38
A cloud engineer needs to integrate a new payment processor with an existing e- commerce website. Which of the following technologies is the best fit for this integration?

A. RPC over SSL
B. Transactional SQL
C. REST API over HTTPS

D. Secure web socket

Answer: C

Explanation:
The best technology for integrating a new payment processor with an existing e-commerce website is a REST API over HTTPS. This method is widely used for web services, allowing secure communication over the internet and a standardized way for applications to communicate with each other. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Integration

NEW QUESTION 43
Which of the following best describes a system that keeps all different versions of a software separate from each other while giving access to all of the versions?

A. Code documentation
B. Code control
C. Code repository
D. Code versioning

Answer: D

Explanation:
A system that keeps all different versions of software separate from each other while providing access to all of the versions is best described by Code versioning. Code versioning systems, such as Git, allow developers to keep track of changes, revert to previous states, and manage multiple versions of codebases.References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 48
A CI/CD pipeline is used to deploy VMs to an laaS environment. Which of the following can be used to harden the operating system once the VM is running?

A. Docker
B. Kubernetes
C. Git
D. Ansible

Answer: D

Explanation:
Ansible can be used to harden the operating system once the VM is running. It is an automation tool that can configure systems, deploy software, and orchestrate more advanced IT tasks such as continuous deployments or zero downtime rolling updates.References: Ansible and other configuration management tools are part of the cloud management strategies discussed in the CompTIA Cloud+ certification material.

NEW QUESTION 53
A company has one cloud-based web server that is prone to downtime during maintenance. Which ot the following should the cloud engineer add to ensure high availability?

A. A redundant web server behind a load balancer
B. A backup cloud web server
C. A secondary network link to the web server
D. An autoscaling feature on the web server

Answer: A

Explanation:
Adding a redundant web server behind a load balancer is the solution that will ensure high availability. If one server goes down for maintenance, the other can take over, ensuring that the web service remains available without interruption.References: High availability concepts, including the use of load balancers and redundant servers, are part of cloud infrastructure design as per CompTIA Cloud+.

NEW QUESTION 58
A customer is migrating applications to the cloud and wants to grant authorization based on the classification levels of each system. Which of the following should the customer implement to ensure authorisation to systems is granted when the user and system classification properties match? (Select two).

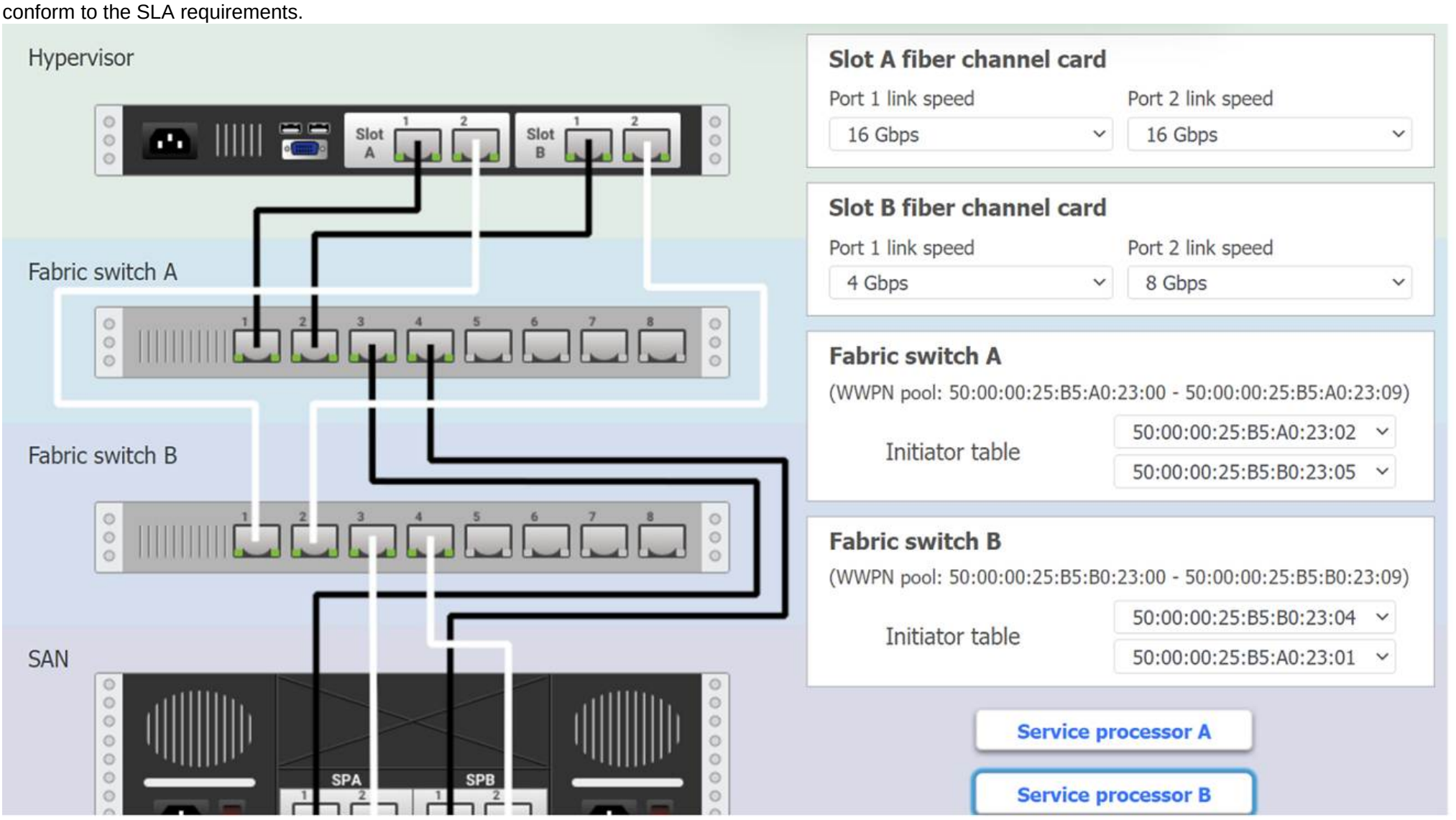
A. Resource tagging
B. Discretionary access control
C. Multifactor authentication
D. Role-based access control
E. Token-based authentication
F. Bastion host

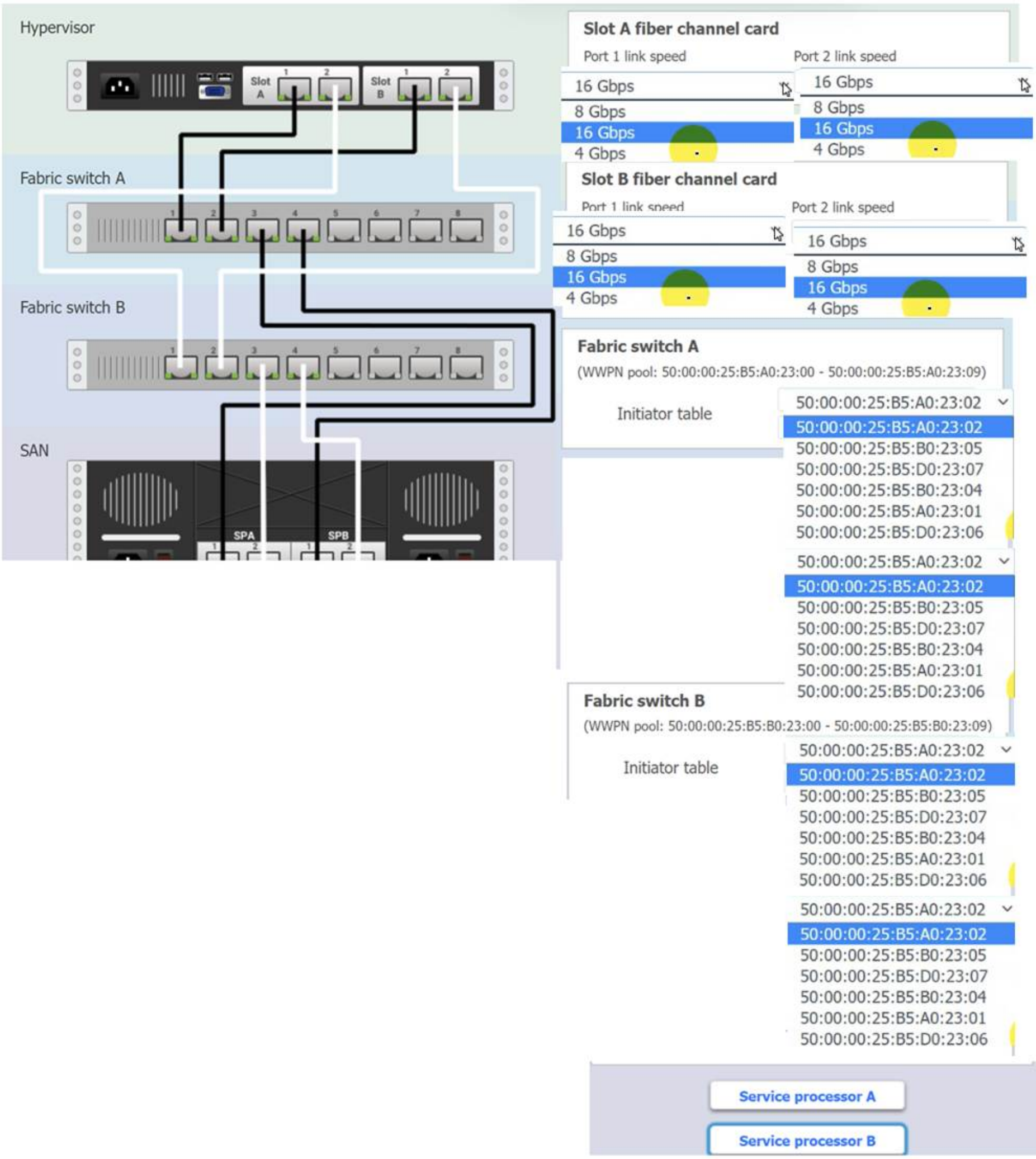
Answer: BD

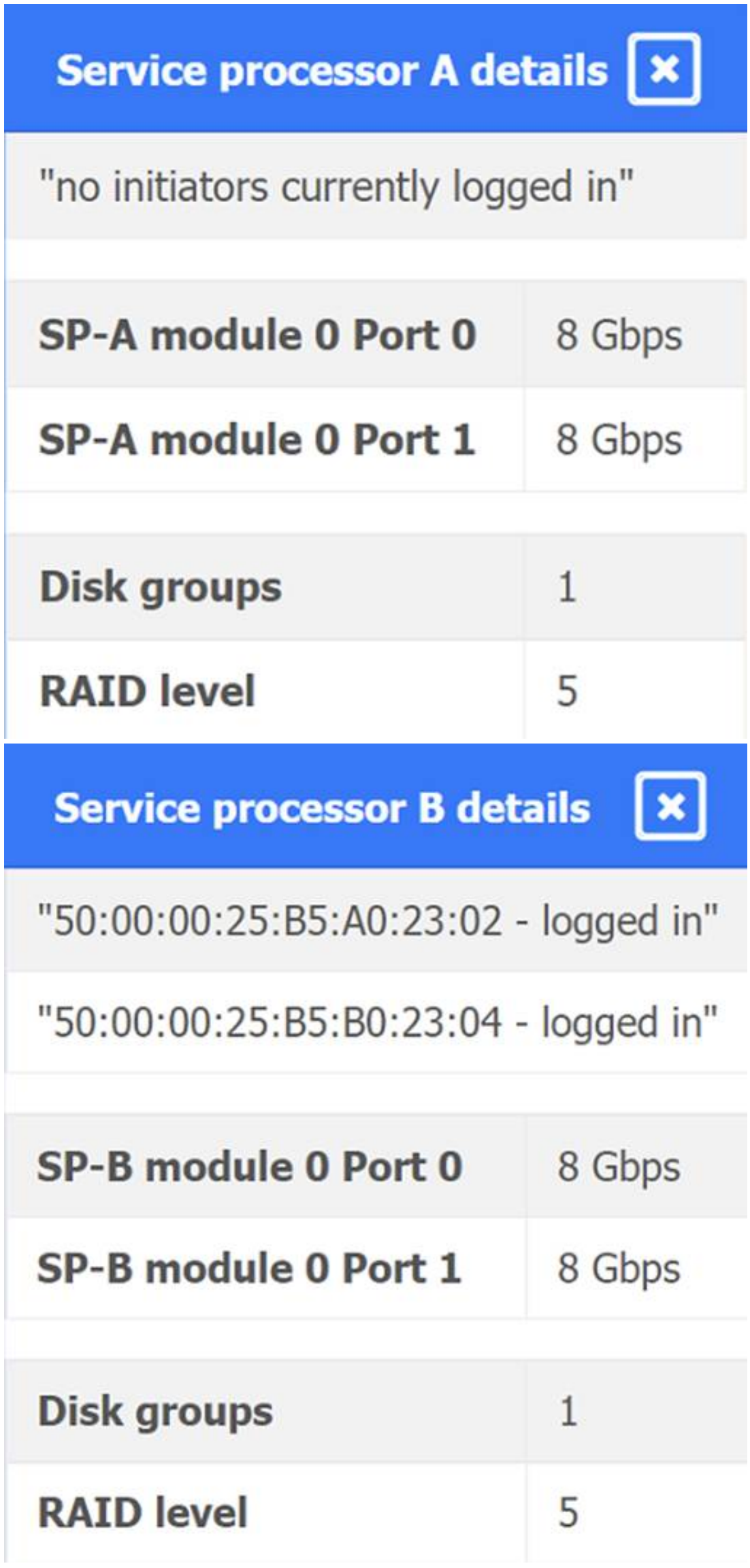
Explanation:
Discretionary Access Control (DAC) and Role-Based Access Control (RBAC) are effective methods for granting authorization based on system classification levels. DAC allows resource owners to grant access rights, making it flexible for environments with varying classification levels. RBAC assigns permissions based on roles within an organization, aligning access rights with the user's job functions and ensuring that users access only what is necessary for their role, which can be mapped to system classifications.References: CompTIA Cloud+ content covers various access control models, emphasizing the importance of implementing appropriate security measures that align with organizational policies and classification levels to ensure secure and authorized access to cloud systems.

NEW QUESTION 59
SIMULATION

You are a cloud engineer working for a cloud service provider that is responsible for an IaaS offering.
Your customer, who creates VMs and manages virtual storage, has noticed I/O bandwidth issues and low IOPS (under 9000).
Your manager wants you to verify the proper storage configuration as dictated by your service level agreement (SLA).
The SLA specifies:
. Each SFP on the hypervisor host must be set to the maximum link speed
allowed by the SAN array. . All SAN array disk groups must be configured in a RAID 5.
. The SAN array must be fully configured for redundant fabric paths. . IOPS should not fall below 14000
INSTRUCTIONS
Click on each service processor to review the displayed information. Then click on the drop-down menus to change the settings of each device as necessary to conform to the SLA requirements.



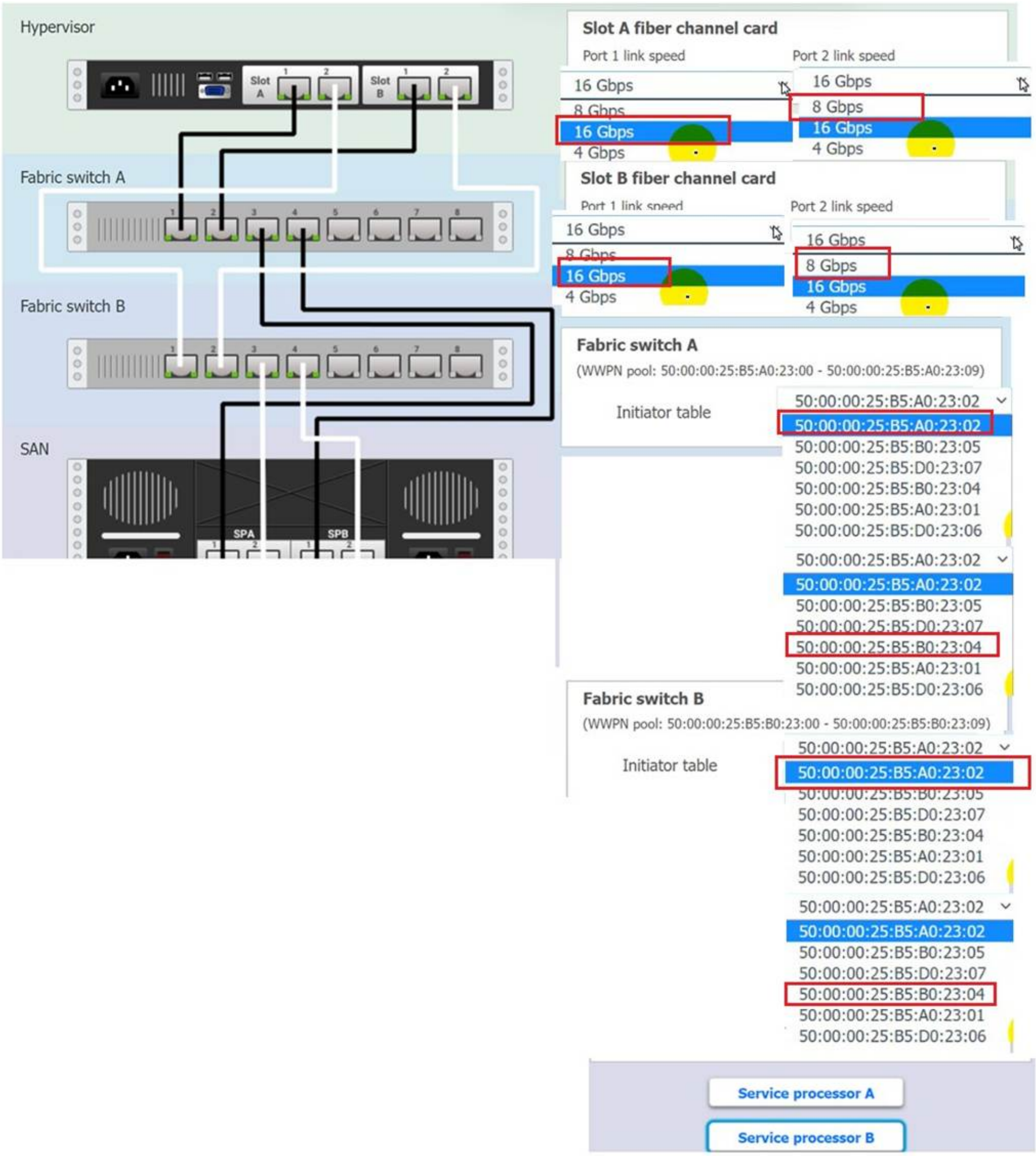

Hypervisor
Slot A
Slot B
Fabric switch A
Fabric switch B
SAN
SPA
SPB
Service processor A
Service processor B
Slot A fiber channel card
Port 1 link speed
Port 2 link speed
16 Gbps
8 Gbps
16 Gbps
4 Gbps
Slot B fiber channel card
Port 1 link speed
Port 2 link speed
16 Gbps
8 Gbps
16 Gbps
4 Gbps
Fabric switch A
(WWPN pool: 50:00:00:25:B5:A0:23:00 - 50:00:00:25:B5:A0:23:09)
Initiator table
50:00:00:25:B5:A0:23:02
50:00:00:25:B5:B0:23:05
50:00:00:25:B5:D0:23:07
50:00:00:25:B5:B0:23:04
50:00:00:25:B5:A0:23:01
50:00:00:25:B5:D0:23:06
Fabric switch B
(WWPN pool: 50:00:00:25:B5:B0:23:00 - 50:00:00:25:B5:B0:23:09)
Initiator table
50:00:00:25:B5:A0:23:02
50:00:00:25:B5:B0:23:05
50:00:00:25:B5:D0:23:07
50:00:00:25:B5:B0:23:04
50:00:00:25:B5:A0:23:01
50:00:00:25:B5:D0:23:06



A. Mastered
B. Not Mastered

Answer: A

Explanation:
Based on the SLA requirements and the information provided in the diagram: For the Hypervisor:
Slot A fiber channel card:
? Port 1 link speed should be set to 16 Gbps since it's connected to Fabric switch A which supports 16 Gbps.
? Port 2 link speed should be set to 8 Gbps because it's connected to Fabric switch B which supports up to 8 Gbps.
Slot B fiber channel card:
? Port 1 link speed should be set to 16 Gbps since it's connected to Fabric switch A which supports 16 Gbps.
? Port 2 link speed should be set to 8 Gbps because it's connected to Fabric switch
B which supports up to 8 Gbps.



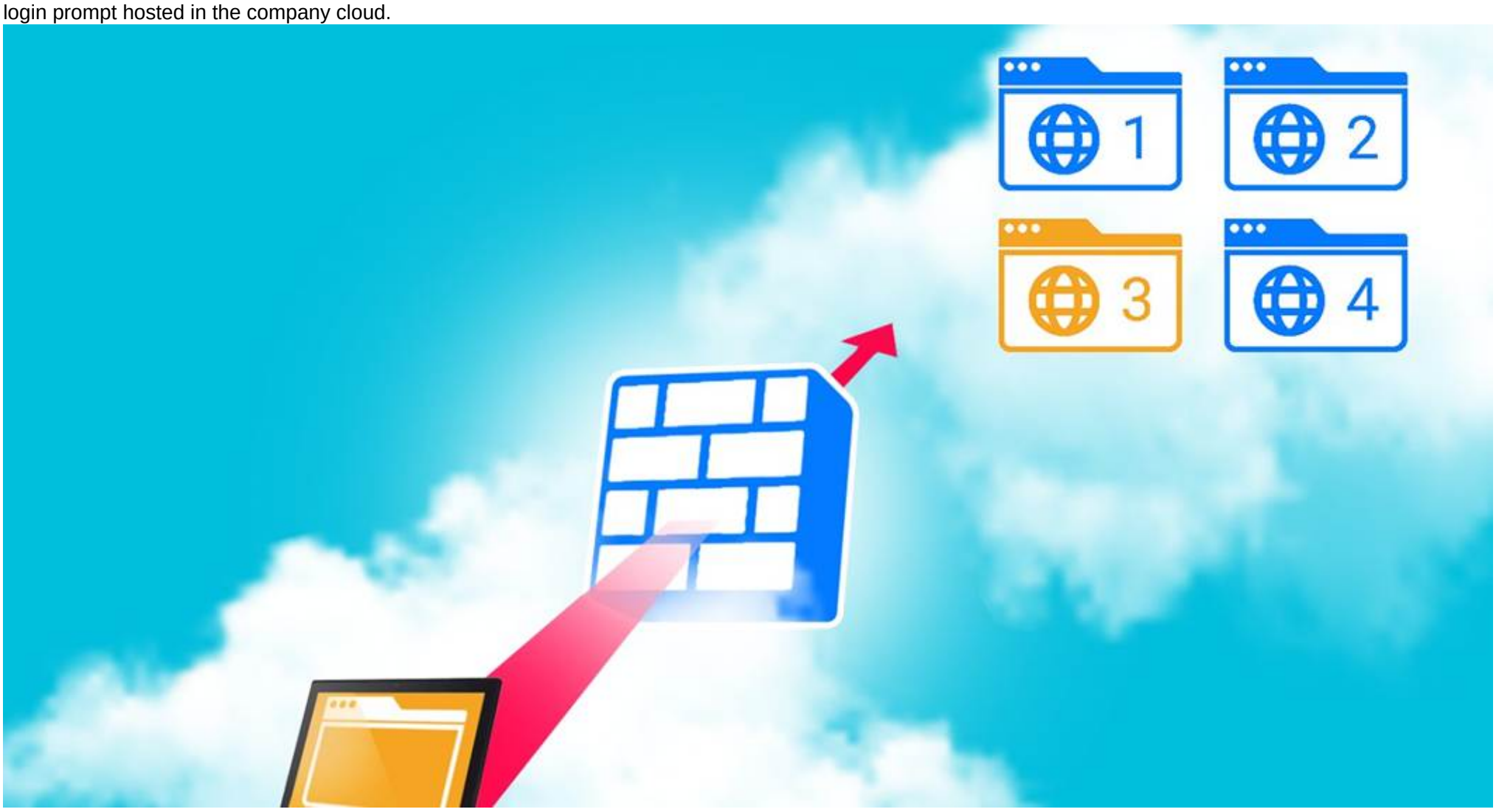
NEW QUESTION 64
An engineer wants lo scale several cloud workloads on demand. Which of the following approaches is the most suitable?

A. Load
B. Scheduled
C. Manual
D. Trending

Answer: A

Explanation:
Load scaling is the most suitable approach for scaling several cloud workloads on demand. It automatically adjusts the number of active servers in a cloud environment based on the current load or traffic, ensuring that resources are efficiently utilized to meet demand without manual intervention. This approach helps maintain optimal performance and availability, particularly during unexpected surges in workload or traffic.References: Understanding cloud management and technical operations, including scaling strategies, is crucial for optimizing resource utilization and performance in cloud environments, as outlined in the CompTIA Cloud+ objectives.

NEW QUESTION 67
SIMULATION
A company hosts various containerized applications for business uses. A client reports that one of its routine business applications fails to load the web-based login prompt hosted in the company cloud.



INSTRUCTIONS
Click on each device and resource. Review the configurations, logs, and characteristics of each node in the architecture to diagnose the issue. Then, make the necessary changes to the WAF configuration to remediate the issue.
Web app 1

Web app 1

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp1	FIN	10.22.10.11	443

Web app 2

Web app 2

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp2	VIDEO	10.22.10.21	443

Web app 3

Web app 3

SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp3	API	10.22.10.31	443

Web app 4

Web app 4

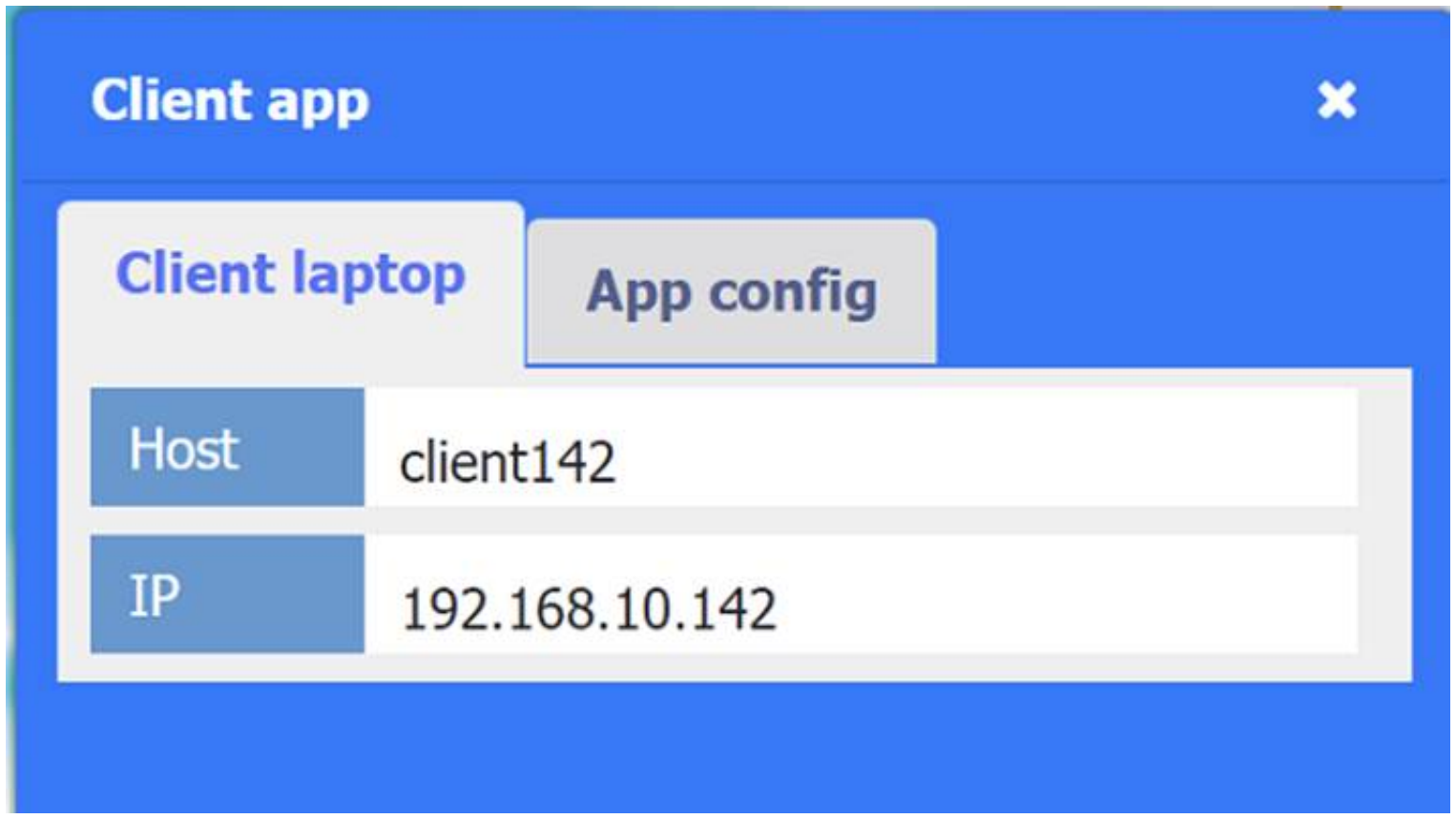
SVC_Host	SVC_Name	SVC IP	SVC_Port
webapp4	CHAT	10.22.10.41	443

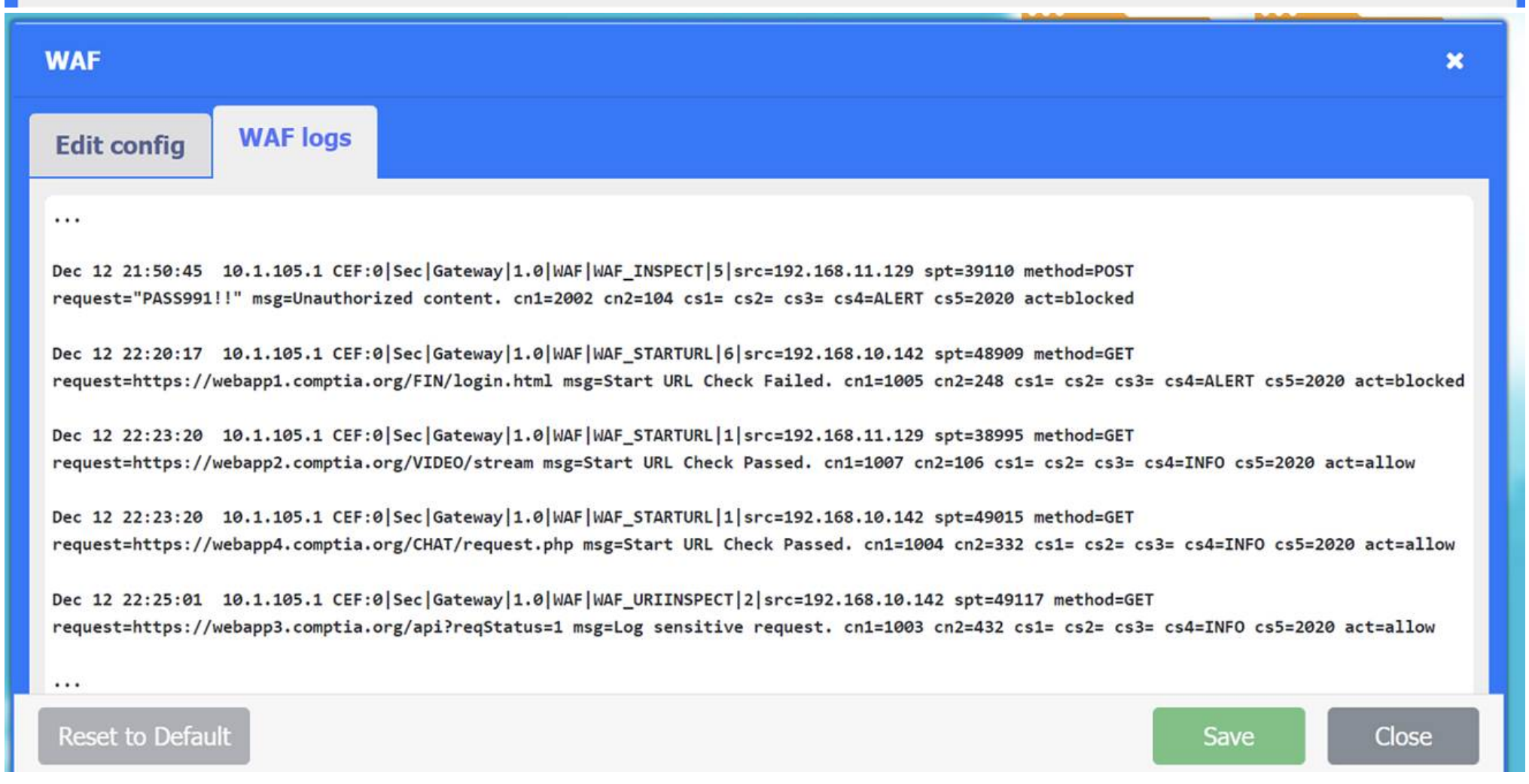
Client app

Client app

Client laptop | App config

https_enabled	true
cert_status	valid
start	login





A. Mastered
B. Not Mastered

Answer: A

Explanation:
The issue is with Web app 1 (Finance application).
From the WAF logs, we can see that requests to https://webapp1.comptia.org/FIN/login.htmlare being blocked (Rule ID 1006). The rule is configured to block access to the finance application's login page. This corresponds to the reported issue of the web-based login prompt not loading.
To remediate the issue, the WAF configuration for Rule ID 1006 should be changed from "Block" to "Allow". This will enable the web-based login prompt to load for the client. Additionally, the client app configuration indicates that the client laptop (IP 192.168.10.142) is trying to access the service, and the WAF logs show that requests from this IP are being blocked due to the current rule set. Changing the action for Rule ID 1006 will also ensure that legitimate attempts to access the login page from this IP are not blocked.
Steps for remediation:
? Go to the WAF configuration.
? Find Rule ID 1006 for the Finance application 1.
? Change the action from "Block" to "Allow".
? Save the changes.
References:
? Web application firewall (WAF) configurations typically include rules that define which traffic should be allowed or blocked. Blocking legitimate traffic to login pages can prevent users from accessing the application, which seems to be the case here.
? Client application configurations and WAF logs provide valuable insights into the source of the traffic and the rules that are affecting it. It's important to ensure that the rules align with the intended access policies for the application.

NEW QUESTION 71
A customer relationship management application, which is hosted in a public cloud laaS network, is vulnerable to a remote command execution vulnerability.
Which of the following is the best solution for the security engineer to implement to prevent the application from being exploited by basic attacks?

A. IPS
B. ACL
C. DLP
D. WAF

Answer: D

Explanation:
A Web Application Firewall (WAF) is the best solution to implement for a public cloud IaaS hosted customer relationship management application vulnerable to remote command execution attacks. WAFs are designed to monitor, filter, and block malicious HTTP/S traffic to and from a web application to protect against various application layer attacks, including remote command execution. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Security in the Cloud

NEW QUESTION 73
An administrator needs to provide a backup solution for a cloud infrastructure that enables the resources to run from another data center in case of a outage. Connectivity to the backup data center is via a third-party, untrusted network. Which of the following is the most important feature required for this solution?

A. Deduplication
B. Replication
C. Compression
D. Encryption
E. Labeling

Answer: D

Explanation:
When backing up data that will traverse a third-party, untrusted network, encryption is the most important feature to ensure the confidentiality and integrity of the data. Encryption will protect the data from potential interception or tampering during transit to the backup data center. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274-282-2)

NEW QUESTION 74
Given the following command:
Sdocker pull images.comptia.org/user1/myimage:latest
Which of the following correctly identifies images.comptia.org?

A. Image registry
B. Image creator
C. Image version
D. Image name

Answer: A

Explanation:
In the Docker pull command given,images.comptia.orgrepresents the image registry. A Docker image registry is a collection of repositories that host Docker images. It is where images arestored and organized, and from where they can be pulled for deployment.References: Docker and container management concepts, including image registries, are part of the cloud services understanding in the CompTIA Cloud+ curriculum.

NEW QUESTION 77
Following a ransomware attack, the legal department at a company instructs the IT administrator to store the data from the affected virtual machines for a minimum of one year.
Which of the following is this an example of?

A. Recoverability
B. Retention

C. Encryption
D. Integrity

Answer: B

Explanation:
The instruction by the legal department to store data from the affected virtual machines for a minimum of one year is an example of data Retention. Retention policies are often driven by regulatory compliance requirements and dictate how long certain types of data must be kept before they can be securely disposed of. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 80
An administrator received a report that company data has been compromised. The compromise occurred on a holiday, and no one in the organization was working. While reviewing
the logs from the holiday, the administrator noted the following details:

Account	Access	Details
Cloud administrator	Granted	Log-in granted
Software developer	Granted	Log-in granted
Software developer	Denied	Denied access to human resources folder
Security engineer	Granted	Log-in granted
Security engineer	Denied	Denied access to personnel files
Human resources manager	Granted	Log-in granted
Human resources manager	Granted	Access granted to human resources folder

The most appropriate action for the cloud security analyst to recommend is using CIS- hardened images. These images are pre-configured by the Center for Internet Security to provide security benchmark standards that help in mitigating vulnerabilities in publicly available container images.References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security Posture
Which of the following accounts should the administrator disable to prevent a further breach?

A. Cloud administrator
B. Human resources manager
C. Security engineer
D. Software developer

Answer: D

Explanation:
Based on the provided log details, the account of the Software Developer was used to gain unauthorized access. This account should be disabled to prevent further breaches, especially considering no one from the organization was working during the holiday, suggesting a compromised account. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Security

NEW QUESTION 83
A cloud engineer was deploying the company's payment processing application, but it failed with the following error log:
ERFOR:root: Transaction failed http 429 response, please try again Which of the following are the most likely causes for this error? (Select two).

A. API throttling
B. API gateway outage
C. Web server outage
D. Oversubscription
E. Unauthorized access
F. Insufficient quota

Answer: AF

Explanation:
The error "http 429 response, please try again" typically indicates API throttling, where the number of requests exceeds the rate limit set by the API provider, and insufficient quota, where the allowed number of API calls within a given timeframe has been exceeded.References: API throttling and quota management are key concepts in the management of cloud resources, as highlighted in the CompTIA Cloud+ curriculum.

NEW QUESTION 86
Which of the following is a direct effect of cloud migration on an enterprise?

A. The enterprise must reorganize the reporting structure.
B. Compatibility issues must be addressed on premises after migration.
C. Cloud solutions will require less resources than on-premises installations.
D. Utility costs will be reduced on premises.

Answer: D

Explanation:
Cloud migration typically results in a reduction of on-premises utility costs because the physical infrastructure requirements, such as power and cooling, are transferred to the cloud provider. This shift can lead to significant savings in utility expenses for the enterprise. References: CompTIA Cloud+ Guide to Cloud Computing (ISBN: 978-1-64274- 282-2)

NEW QUESTION 89
Which of the following integration systems would best reduce unnecessary network traffic by allowing data to travel bidirectionally and facilitating real-time results for developers who need to display critical information within applications?

A. REST API
B. RPC
C. GraphQL
D. Web sockets

Answer: D

Explanation:
Web sockets provide a full-duplex communication channel over a single, long-lived connection, allowing data to flow bidirectionally between a client and a server. This is ideal for real-time applications where developers need to display critical information without unnecessary network overhead, as it reduces the need for repetitive HTTP requests and allows for more efficient, instantaneous data updates and interactions.

NEW QUESTION 92
A SaaS provider introduced new software functionality for customers as part of quarterly production enhancements. After an update is implemented, users cannot locate certain transactions from an inbound integration. During the investigation, the application owner finds the following error in the logs:
Error: REST API - Deprecated call is no longer supported in this release.
Which of the following is the best action for the application owner to take to resolve the issue?

A. Update the custom integration to use a supported function.
B. Include the custom integration in the quarterly testing scope.
C. Ask the users to monitor the quarterly updates.
D. Revert the application to the last stable quarterly release.

Answer: A

Explanation:
The error message indicates that the SaaS provider has deprecated a function that was previously called by the custom integration. The best action for the application owner to take is to update the custom integration to use a function that is supported in the current release. This is a direct solution to the problem and ensures the custom integration conforms to the updated SaaS provider??s API.References: Based on the error message provided and standard practices for dealing with deprecated API calls in a SaaS environment.

NEW QUESTION 94
A cloud administrator needs to collect process-level, memory-usage tracking for the virtual machines that are part of an autoscaling group. Which of the following is the best way to accomplish the goal by using cloud-native monitoring services?

A. Configuring page file/swap metrics
B. Deploying the cloud-monitoring agent software
C. Scheduling a script to collect the data
D. Enabling memory monitoring in the VM configuration

Answer: B

Explanation:
To collect process-level, memory-usage tracking for virtual machines, deploying cloud- monitoring agent software is the best approach. The agent can gather detailed system metrics and send them to the cloud-native monitoring services for analysis and visualization. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Cloud Monitoring

NEW QUESTION 96
A cloud deployment uses three different VPCs. The subnets on each VPC need to communicate with the others over private channels. Which of the following will achieve this objective?

A. Deploying a load balancer to send traffic to the private IP addresses
B. Creating peering connections between all VPCs
C. Adding BGP routes using the VPCs' private IP addresses
D. Establishing identical routing tables on all VPCs

Answer: B

Explanation:
To allow subnets on different VPCs to communicate with each other over private channels, the cloud engineer should create peering connections between all the VPCs. VPC Peering allows networks to connect and route traffic using private IP addresses without the need for gateways, VPN connections, or separate physical hardware. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 98
An organization has been using an old version of an Apache Log4j software component in its critical software application. Which of the following should the organization use to calculate the severity of the risk from using this component?

A. CWE
B. CVSS
C. CWSS
D. CVE

Answer: B

Explanation:
The Common Vulnerability Scoring System (CVSS) is what the organization should use to calculate the severity of the risk from using an old version of Apache Log4j software component. CVSS provides an open framework for communicating the characteristics and impacts of IT vulnerabilities. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Risk Management

NEW QUESTION 99
A cloud security analyst is concerned about security vulnerabilities in publicly available container images. Which of the following is the most appropriate action for the analyst to recommend?

A. Using CIS-hardened images
B. Using watermarked images
C. Using digitally signed images
D. Using images that have an application firewall

Answer: A

NEW QUESTION 104
A cloud engineer is reviewing a disaster recovery plan that includes the following requirements:
• System state, files, and configurations must be backed up on a weekly basis.
• The system state, file, and configuration backups must be tested annually.
Which of the following backup methods should the engineer implement for the first week the plan is executed?

A. Differential
B. Incremental
C. Snapshot
D. Full

Answer: D

Explanation:
A full backup method should be implemented for the first week the disaster recovery plan is executed. This will ensure that a complete copy of the system state, files, and configurations are backed up. Subsequent backups can be differential or incremental as per the plan.References: Backup methodologies, including the importance of full backups, are part of the data management strategies in cloud computing covered in the CompTIA Cloud+ certification.

NEW QUESTION 108
A log-parsing application requires significant processing power to ingest the logs streaming from web servers. The engineering team presents the cloud architect with four proposals using the same underlying hardware. Which of the following should the cloud architect select in order to minimize the impact of an instance failure while keeping the cost as low as possible?

A. Four instances of 4vCPU, 8GB RAM, 80GB SSD
B. Four instances of 4vCPU, 8GB RAM, 80GB HDD
C. Two instances of 8vCPU, 16GB RAM, 80GB SSD
D. Two instances of 8vCPU, 16GB RAM, 80GB HDD

Answer: A

Explanation:
Choosing four instances with the given specifications would distribute the load and reduce the impact of any single instance failure. Using SSDs over HDDs would provide faster data processing capabilities which is crucial for a log-parsing application. This setup also retains cost efficiency by not over-provisioning resources. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 113
Which of the following container storage types loses data after a restart?

A. Object
B. Persistent volume
C. Ephemeral
D. Block

Answer: C

Explanation:
In the context of container storage, ephemeral storage types are designed to be temporary, losing their data when the container is restarted or deleted. This is in contrast to persistent volumes, which retain data across container restarts and lifecycle, and object and block storage, which are used for specific types of data storage but not inherently temporary. Ephemeral storage is often used for temporary computation data, caching, or any data that doesn't need to persist beyond the lifecycle of the container instance.

References: CompTIA Cloud+ CV0-004 Study Guide and Official CompTIA Content

NEW QUESTION 117
Which of the following compute resources is the most optimal for running a single scripted task on a schedule?

A. Bare-metal server
B. Managed container
C. Virtual machine
D. Serverless function

Answer: D

Explanation:
Serverless functions are ideal for running scripted tasks on a schedule because they can be triggered by events, run the task, and then shut down, incurring costs only for the actual compute time used. This eliminates the need for a continuously running server and is optimal for sporadic or scheduled tasks. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg.

NEW QUESTION 118
A cloud engineer is designing a high-performance computing cluster for proprietary software. The software requires low network latency and high throughput between cluster nodes.
Which of the following would have the greatest impact on latency and throughput when designing the HPC infrastructure?

A. Node placement
B. Node size
C. Node NIC
D. Node OS

Answer: A

Explanation:
Node placement is critical in high-performance computing (HPC) clusters where low network latency and high throughput are required. Proper placement of nodes within the network infrastructure, including proximity to each other and to key network components, can significantly reduce latency and increase throughput. Ensuring that nodes are physically close and well-connected can facilitate faster data transfer rates between them. References: CompTIA Cloud+ Certification Study Guide (Exam CV0-004) by Scott Wilson and Eric Vanderburg

NEW QUESTION 119
A developer is deploying a new version of a containerized application. The DevOps team wants:
• No disruption
• No performance degradation
* Cost-effective deployment
• Minimal deployment time
Which of the following is the best deployment strategy given the requirements?

A. Canary
B. In-place
C. Blue-green
D. Rolling

Answer: C

Explanation:
The blue-green deployment strategy is the best given the requirements for no disruption, no performance degradation, cost-effective deployment, and minimal deployment time. It involves maintaining two identical production environments (blue and green), where one hosts the current application version and the other is used to deploy the new version. Once testing on the green environment is complete, traffic is switched from blue to green, ensuring a seamless transition with no downtime.References: Understanding various cloud deployment strategies, such as blue-green deployments, is essential for managing cloud environments effectively, as highlighted in the CompTIA Cloud+ objectives, to ensure smooth and efficient application updates.

NEW QUESTION 123
A cloud engineer wants containers to run the latest version of a container base image to reduce the number of vulnerabilities. The applications in use requite Python 3.10 and ate not compatible with any other version. The containers' images are created every time a new version is released from the source image. Given the container Dockerfile below:

```
FROM cgr.dev/chainguard/python:3.10
WORKDIR /myapp
COPY main.py ./
ENTRYPOINT ["python", "/myapp/main.py"]
```

Which of the following actions will achieve the objectives with the least effort?

A. Perform docker pull before executing docker run.
B. Execute docker update using a local cron to get the latest container version.
C. Change the image to use python:latest on the image build process.
D. Update the Dockerfile to pin the source image version.

Answer: A

Explanation:
Performing a "docker pull" before executing "docker run" ensures that the latest version of the container base image is used, aligning with the objective of reducing vulnerabilities. This command fetches the latest image version from the repository, ensuring that the container runs the most up-to-date and secure version of the base image. This approach is efficient and requires minimal effort, as it automates the process of maintaining the latest image versions for container deployments.References: Within the CompTIA Cloud+ examination scope, understanding management and technical operations in cloud environments, including container management and security, is critical. This includes best practices for maintaining up-to-date container images to minimize vulnerabilities.

NEW QUESTION 127
Which of the following is a field of computer science that enables computers to identify and understand objects and people in images and videos?

A. Image reconstruction
B. Facial recognition
C. Natural language processing
D. Computer vision

Answer: D

Explanation:
Computer vision is a field of computer science that enables computers to identify and understand objects and people in images and videos. It involves the development of systems that can capture and interpret visual information from the world, similar to the way humans do.References: The application of computer vision and its role in cloud services, particularly in relation to AI and machine learning capabilities, is discussed in CompTIA Cloud+.

NEW QUESTION 131
Which of the following provides secure, private communication between cloud environments without provisioning additional hardware or appliances?

A. VPN
B. VPC peering
C. BGP
D. Transit gateway

Answer: B

Explanation:
VPC peering provides secure, private communication between cloud environments without the need for provisioning additional hardware or appliances. It allows direct network connectivity between two Virtual Private Clouds (VPCs), enabling resources in either VPC to communicate with each other using private IP addresses.References: Cloud networking options such as VPC peering and its benefits are included in the networking concepts of cloud environments in the CompTIA Cloud+ certification.

NEW QUESTION 134
A company wants to combine solutions in a central and scalable environment to achieve the following goals:
• Control
• Visibility
• Automation
• Cost efficiency
Which of the following best describes what the company should implement?

A. Batch processing
B. Workload orchestration
C. Containerization
D. Application modernization

Answer: B

Explanation:
Workload orchestration is the best description of what the company should implement to achieve control, visibility, automation, and cost efficiency. It involves using orchestration tools to manage workloads in cloud environments, ensuring resources are used efficiently and operations are automated.References: Workload orchestration is a part of cloud management strategies discussed under the Management and Technical Operations domain in the CompTIA Cloud+ objectives.

NEW QUESTION 137
Which of the following industry standards mentions that credit card data must not be exchanged or stored in cleartext?

A. CSA
B. GDPR
C. SOC2
D. PCI-DSS

Answer: D

Explanation:
The Payment Card Industry Data Security Standard (PCI-DSS) is the industry standard that mandates that credit card data must not be stored or transmitted in cleartext. It includes requirements for encryption, access control, and other security measures to protect cardholder data. References: Official PCI Security Standards Council Site.

NEW QUESTION 139

A company recently set up a CDN for its photography and image-sharing website. Which of the following is the most likely reason for the company's action?

A. To eliminate storage costs
B. To improve site speed
C. To enhance security of static assets
D. To prevent unauthorized access

Answer: B

Explanation:
The most likely reason for setting up a Content Delivery Network (CDN) is to improve site speed, especially for a photography and image-sharing website. CDNs cache content at edge locations closer to end-users, significantly reducing load times for static assets like images and videos. This enhancement in speed can improve user experience and site performance.
References: CompTIA Cloud+ resources and CDN functionality

NEW QUESTION 141
Which of the following best explains the concept of migrating from on premises to the cloud?

A. The configuration of a dedicated pipeline to transfer content to a remote location
B. The creation of virtual instances in an external provider to transfer operations of selected servers into a ne
C. remotely managed environment
D. The physical transportation, installation, and configuration of company IT equipment in a cloud services provider's facility
E. The extension of company IT infrastructure to a managed service provider

Answer: B

Explanation:
Migrating from on-premises to the cloud generally involves creating virtual instances in an external provider's environment and transferring the operations of selected servers to this new, remotely managed setup. This process allows organizations to leverage the cloud provider's resources and services.References: The migration process and strategies are topics included in the Business Principles of Cloud Environments within the CompTIA Cloud+ curriculum.

NEW QUESTION 145
An engineer made a change to an application and needs to select a deployment strategy that meets the following requirements:
• Is simple and fast
• Can be performed on two Identical platforms
Which of the following strategies should the engineer use?

A. Blue-green
B. Canary
C. Rolling
D. in-place

Answer: A

Explanation:
The blue-green deployment strategy is ideal for scenarios where simplicity and speed are crucial. It involves two identical production environments: one (blue) hosts the current application version, while the other (green) is used to deploy the new version. Once testing is completed on the green environment and it's ready to go live, traffic is switched from blue to green, ensuring a quick and efficient rollout with minimal downtime. This method allows for immediate rollback if issues arise, by simply redirecting the traffic back to the blue environment.References: CompTIA Cloud+ material emphasizes the importance of understanding various cloud deployment strategies, including blue-green, and their application in real-world scenarios to ensure efficient and reliable software deployment in cloud environments.

NEW QUESTION 150
A developer is testing code that will be used to deploy a web farm in a public cloud. The main code block is a function to create a load balancer and a loop to create 1.000 web servers, as shown below:

```
my_load_balancer()
for x in range(1000):
    my_web_server()
```

The developer runs the code against the company's cloud account and observes that the load balancer is successfully created, but only 100 web servers have been created. Which of the following should the developer do to fix this issue?

A. Request an increase of Instance quota.
B. Run the code multiple times until all servers are created.
C. Check the my_web_server () function to ensure it is using the right credentials.
D. Place the my_load_balancer () function after the loop.

Answer: A

Explanation:
The developer should request an increase of the instance quota from the cloud provider. Cloud services often have a limit on the number of instances that can be created, which is known as an instance quota. If the load balancer is successfully created but the number of web servers is limited to 100, it suggests that the

quota has been reached. Increasing the quota will allow the creation of additional web server instances up to the desired number.References: The scenario reflects an understanding of cloud resource management and limitations, which is a part of the CompTIA Cloud+ curriculum, specifically under the domain of Management and Technical Operations.

NEW QUESTION 153
A healthcare organization must follow strict compliance requirements to ensure that Pll is not leaked. The cloud administrator needs to ensure the cloud email system can support this requirement Which of the following should the organization enable?

A. IPS
B. OLP
C. ACL
D. WAF

Answer: B

Explanation:
To ensure that Personally Identifiable Information (PII) is not leaked and to comply with strict healthcare regulations, the organization should enable Data Loss Prevention (DLP). DLP systems are designed to detect and prevent unauthorized access or sharing of sensitive data, making them ideal for securing PII in cloud email systems and ensuring compliance with healthcare industry standards.References: CompTIA Cloud+ content covers governance, risk, compliance, and security aspects of cloud computing, highlighting the role of DLP in safeguarding sensitive information and maintaining compliance in regulated industries like healthcare.

NEW QUESTION 157
A cloud administrator needs to distribute workloads across remote data centers for redundancy reasons. Which of the following deployment strategies would eliminate downtime, accelerate deployment, and remain cost efficient?

A. In-place
B. Rolling
C. Blue-green
D. Canary

Answer: C

Explanation:
Blue-green deployment is the strategy that can eliminate downtime, accelerate deployment, and remain cost-efficient. It involves running two identical production environments, only one of which is live at any given time (blue or green). When it's time to deploy, the new version is released to the inactive environment (green), which is then thoroughly tested. Once ready, the traffic is switched over, making the green environment live.References: Deployment strategies and their impact on operations are a significant topic within the CompTIA Cloud+ examination objectives.

NEW QUESTION 160
Five thousand employees always access the company's public cloud-hosted web application on a daily basis during the same time frame. Some users have been reporting performance issues whileattempting to connect to the web application Which of the following is the best configuration approach to resolve this issue?

A. Scale vertically based on a trend.
B. Scale horizontally based on a schedule
C. Scale vertically based on a load.
D. Scale horizontally based on an event

Answer: B

Explanation:
For a web application accessed by a large number of employees daily during the same time frame, the best configuration approach to resolve performance issues is to scale horizontally based on a schedule. This means adding more server instances to handle the load during known peak times.References: Cloud resource scaling strategies, including scheduled horizontal scaling, are discussed in the CompTIA Cloud+ curriculum under cloud management and optimization.

NEW QUESTION 162
A cloud engineer is designing a cloud-native, three-tier application. The engineer must adhere to the following security best practices:
• Minimal services should run on all layers of the stack.
• The solution should be vendor agnostic.
• Virealization could be used over physical hardware.
Which of the following concepts should the engineer use to design the system to best meet these requirements?

A. Virtual machine
B. Micro services
C. Fan-out
D. Cloud-provided managed services

Answer: B

Explanation:
Microservices architecture is the most suitable design principle that aligns with the security best practices mentioned. It involves developing a suite of small services, each running in its own process and communicating with lightweight mechanisms, often an HTTP resource API. This architecture minimizes the services running on each layer, allows for vendor-agnostic solutions,and is well-suited for virtualization over physical hardware.References: Microservices as an architectural approach is discussed in the context of cloud-native applications within the CompTIA Cloud+ material.

NEW QUESTION 164
A cloud engineer is reviewing the following Dockerfile to deploy a Python web application:

```
FROM cgr.dev/chainguard/python:latest
WORKDIR /myapp
COPY main.py ./
ENTRYPOINT ["python", "/myapp/main.py"]
```

Which of the following changes should the engineer make lo the file to improve container security?

A. Add the instruction "JSER nonroot.
B. Change the version from latest to 3.11.
C. Remove the EHTRYPOIKT instruction.
D. Ensure myapp/main.pyls owned by root.

Answer: A

Explanation:
To improve container security, the engineer should add the instruction "USER nonroot" to the Dockerfile. This change ensures that the container does not run as the root user, which reduces the risk of privilege escalation attacks. Running containers as a non-root user is a best practice for enhancing security in containerized environments.References: CompTIA Cloud+ content includes security concerns, measures, and concepts for cloud operations, highlighting container security best practices such as running containers with least privilege to mitigate security risks.

NEW QUESTION 165
A company recently migrated to a public cloud provider. The company's computer incident response team needs to configure native cloud services tor detailed logging. Which of the following should the team implement on each cloud service to support root cause analysis of past events? {Select two).

A. Log retention
B. Tracing
C. Log aggregation
D. Log rotation
E. Hashing
F. Encryption

Answer: AC

Explanation:
For detailed logging to support root cause analysis of past events, the team should implement log retention to ensure logs are kept for the necessary amount of time and log aggregation to compile logs from various sources for easier analysis and correlation.References: Log management practices, including retention and aggregation, are part of the cloud management strategies covered in the CompTIA Cloud+ curriculum, particularly in the domain of technical operations.

NEW QUESTION 170
Which of the following communication methods between on-premises and cloud environments would ensure minimal-to-low latency and overhead?

A. Site-to-site VPN
B. Peer-to-peer VPN
C. Direct connection
D. peering

Answer: C

Explanation:
A direct connection between on-premises and cloud environments involves a dedicated, private connection that does not traverse the public internet. This setup ensures minimal-to-low latency and overhead, providing more consistent network performance and reliability compared to other methods like VPNs or public internet connections, making it suitable for high-volume or latency-sensitive applications.

NEW QUESTION 173
A cloud service provider requires users to migrate to a new type of VM within three months. Which of the following is the best justification for this requirement?

A. Security flaws need to be patched.
B. Updates could affect the current state of the VMs.
C. The cloud provider will be performing maintenance of the infrastructure.
D. The equipment is reaching end of life and end of support.

Answer: D

Explanation:
The best justification for a cloud service provider requiring users to migrate to a new type of VM within a specific time frame is that the equipment is reaching end of life and end of support (EOL/EOS). This means that the older type of VM will no longer receive updates or support, which could include important security patches, so it is necessary to move to newer VM types to maintain security and performance. References: CompTIA Cloud+ Study Guide (Exam CV0-004) by Todd Montgomery and Stephen Olson

NEW QUESTION 177
A cloud engineer wants to run a script that increases the volume storage size if it is below 100GB. Which of the following should the engineer run?

○ A.
```
if [ VOL = describe_volume_size(get_volume(VM)) < 100]
    resize_size(VOL)
else
     echo "$vol is already larger than 100GB"
```

○ B.
```
if [ VOL = describe_volume_size(get_volume(VM)) + 100]
    resize_size(VOL)
else
     echo "$vol is already larger than 100GB"
```

○ C.
```
if [ VOL = describe_volume_size(get_volume(VM)) != 100]
    resize_size(VOL)
else
     echo "$vol is already larger than 100GB"
```

○ D.
```
if [ VOL = describe_volume_size(get_volume(VM)) == 100]
    resize_size(VOL)
else
     echo "$vol is already larger than 100GB"
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

Explanation:
The correct script is Option A, which uses a conditional test to check if the volume size is less than 100GB. If it is, then it performs a resize operation; otherwise, it outputs a message indicating the volume is already the desired size. References: CompTIA Cloud+ Study Guide (Exam CV0-004) - Chapter on Automation

NEW QUESTION 178
A security analyst confirms a zero-day vulnerability was exploited by hackers who gained access to confidential customer data and installed ransomware on the server Which of the following steps should the security analyst take? (Select two).

A. Contact the customers to inform them about the data breach.
B. Contact the hackers to negotiate payment lo unlock the server.
C. Send a global communication to inform all impacted users.
D. Inform the management and legal teams about the data breach
E. Delete confidential data used on other servers that might be compromised.
F. Modify the firewall rules to block the IP addresses and update the ports.

Answer: AD

Explanation:
After a zero-day exploit resulting in a data breach and ransomware installation, it is critical to inform affected customers about the breach and the potential impact on their data. Additionally, the management and legal teams should be notified to handle the situation in compliance with regulatory requirements and to coordinate an appropriate response.References: Handling security incidents and communication strategies after a data breach are crucial elements of the governance and risk compliance domains in CompTIA Cloud+.

NEW QUESTION 179
A DevOps engineer is performing maintenance on the mail servers for a company's web application. Part of this maintenance includes checking core operating system updates. The servers are currently running version 3.2 of the operating system. The engineer has two update options—one to version 4.1 and the other to version 3.7. Both versions are fully supported by the operating system manufacturer. Which of the following best describes the action the engineer should take?

A. Upgrade to 3.7 in the development environment.
B. Upgrade to 4.1 on one production server at a time.
C. Read the release notes on version 4.1.
D. Schedule a maintenance window and upgrade to 3.7 in the production environment.

Answer: A

Explanation:
Before making any updates to the production environment, the best course of action is to perform the update in a development or testing environment. Upgrading to version 3.7, which is a minor update, is generally less risky and should be tested first to ensure compatibility and stability before considering the major update to version 4.1.References: The process of updating and maintaining servers, including the validation ofupdates in a non-production environment, is part of the technical operations management covered in CompTIA Cloud+.

NEW QUESTION 180
Which of the following application migration strategies will best suit a customer who wants to move a simple web application from an on-premises server to the cloud?

A. Rehost
B. Rearchitect
C. Refactor
D. Retain

Answer: A

Explanation:
Rehosting, often referred to as a "lift and shift" strategy, is the best suit for a customer who wants to move a simple web application from an on-premises server to the cloud. It involves moving the application to the cloud without making significant changes, which can be a quick and cost-effective migration approach for straightforward applications.References: The various cloud migration strategies, including rehosting, are part of the knowledge base for cloud migration in the CompTIA Cloud+ certification.

NEW QUESTION 185
A cloud administrator deploys new VMs in a cluster and discovers they are getting IP addresses in the range of 169.254.0.0/16. Which of the following is the most likely cause?

A. The scope has been exhausted.
B. The network is overlapping.
C. The VLAN is missing.
D. The NAT is Improperly configured.

Answer: A

Explanation:
IP addresses in the range of 169.254.0.0/16 are Automatic Private IP Addressing (APIPA) addresses, which devices assign themselves when they are configured to obtain an IP automatically but are unable to reach a DHCP server to get one. The most likely cause for VMs in a cluster to receive APIPA addresses is the exhaustion of the DHCP scope, meaning there are no more available IP addresses in the DHCP range to be assigned.

NEW QUESTION 188
.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questons and Answers in PDF Format

CV0-004 Practice Exam Features:

* CV0-004 Questions and Answers Updated Frequently

* CV0-004 Practice Questions Verified by Expert Senior Certified Staff

* CV0-004 Most Realistic Questions that Guarantee you a Pass on Your FirstTry

* CV0-004 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year

100% Actual & Verified — Instant Download, Please Click
Order The CV0-004 Practice Test Here